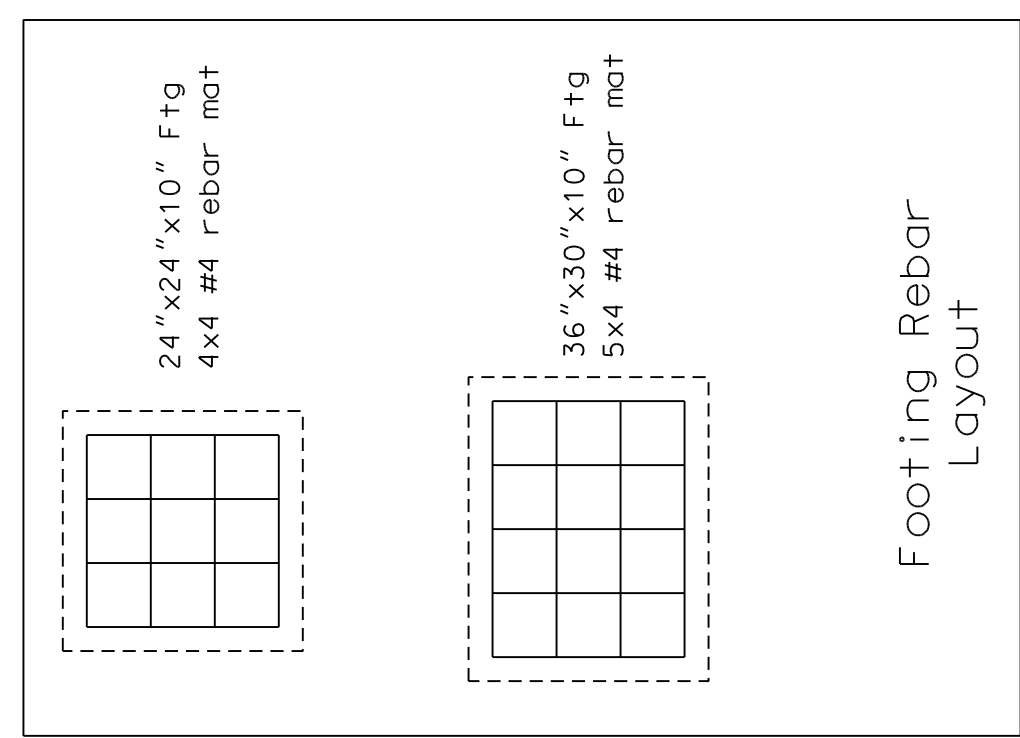
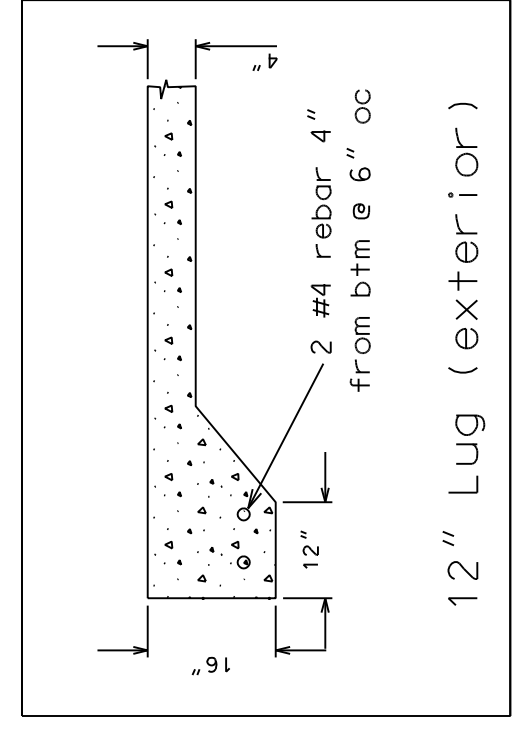


Foundation Plan  
Scale: 1/4" = 1'-0"





# SUMWARD STEEL BUILDINGS

6800 E. Hampden Ave • Denver, CO 80224 • 800-964-8335 • Fax 701-252-1988

## PERMIT DRAWINGS

NOTE: THESE PLANS AND SPECIFICATIONS FOR CONSTRUCTION OF THIS BUILDING ARE NOT TO BE USED FOR ERECTION PURPOSES. THESE PLANS ARE FOR BUILDING DEPARTMENT PERMIT PURPOSES ONLY. THE ANCHOR BOLT PLAN PORTION IS FOR CONSTRUCTION.

- 1) Manufacturer's standard specifications apply unless stipulated in the contract documents, verification of your purchase order and shown within the approval drawings submitted to you from the manufacturer.
- 2) Manufacturer's design, fabrication quality criteria, standard practices, standard materials including primer coatings, and panel finish shall govern the specifications with any other interpretations to the contrary not withstanding. It is understood by all parties that the Project Consultant/End Use Final Owner is responsible for clarification of inclusions or exclusions from specifications and/or architectural plans.
- 3) In case of discrepancies between manufacturer's plans and other trades including but not limited to foundation and architectural plans; manufacturers' plans will govern. (Section 3. AISC Codes of Standard Practices March 2000.)
- 4) Approval of manufacturers' drawings and calculations constitutes acceptance of manufacturer's interpretations, assumptions of design loads and contract documents. (Section 4. AISC Code of standard Practices March 2000.)
- 5) The Project Consultant/End Use Final Owner is responsible for overall project coordination. This includes all interface, compatibility and design considerations covering any materials not supplied or manufactured by Sunward Corporation. This is the ultimate responsibility of the Project Consultant /End Use Final Owner.
- 6) These drawings are subject to the terms of the manufacturer's Engineer's Letter of Certification. Adequacy of the design loads for the area is the responsibility of the Project Consultant/Final Owner. Drawings are sealed only to certify that the structural components to be furnished meet the design loads requested and listed in the Engineer Letter of Certification.
- 7) It is recommended that a qualified Registered Professional Engineer design the foundation. The manufacturer is not responsible for concrete design. See section A3 - Foundations, Metal Building Manufacturers Associations Metal Building Systems Manual.
- 8) Notice to the erectors: Normal erection procedures include corrections, which involve time to determine cause, downtime, use of rental or owned equipment, travel and communication with the manufacturer's service department. Normal erection procedures also include moderate amounts of reaming, field welding (if required by design), cutting, shimming, touch-up painting. These items are not subject to claim for back charges.
- 9) Any change or correction not reported prior to the work being performed will not be eligible for reimbursement. At no time shall an erector alter the structural design without prior approval from the manufacturer's design engineer and service department. Acceptance of correction procedures will not imply acceptance of a back charge unless such changes are accepted in writing; including pay rates, proposed man-hours. Downtime, equipment costs, supervision, overhead, profit, liquidated damages and consequential costs expense are not subject to claim.
- 10) The terms of the claim shall be in accordance with Section IV Common Industry Practices, Section 6. Erection and other fieldwork. Specifically, Section 6.10. "Correction of errors and repairs" of the Metal Building Manufacturers Associations Metal Building Systems

Manual. For a claim form contact the customer services department of the manufacturer @ (701) 252-7390.

- 11) Claims must include written documentation, photographic documentation that shows detail, (part numbers, work performed) and any other pertinent information of completed work.
- 12) **Warning:** In no case should galvalume zinc steel panels be used in conjunction with lead or copper. Both have harmful corrosive effects on the galvalume zinc panels. Even run off from copper should be avoided.
- 13) **Safety:** It is strongly recommended that a safe working job site is a priority to the workforce. **Warnings:** Heights can be dangerous and all safety equipment that is applicable should be used. The manufacturer is not responsible for the work site safety or erection and has not investigated or recommended the erectors for its products. As such, the manufacturer is held harmless for erection quality, accidents, safety and possible OSHA violations. Find out more about OSHA regulations by visiting [www.osha.gov](http://www.osha.gov).
- 14) A325 Bolt tightening requirement. It is the responsibility of the erector to insure proper bolt tightness. See Bolt Tightening method in Erection Manual and general notes of the drawing.
- 15) Protection of primer. The manufacturer's standard primer applied to the structural components is not intended for exterior use or extended exposure to the elements. To protect the primer (structural components "Red Iron") should be covered so they are not exposed to water prior to erection. Water can cause the components to rust. It is recommended that the primed structural components be protected especially if they are not going to be erected immediately. There is no warranty on primer paint against flaking, peeling, fading or shipping abrasions. Touch-up paint will be provided for primer.
- 16) Insurance: It is recommended by the Manufacturer, and Project Consultant/ Final Owner agrees to maintain adequate coverage to insure against risk of loss from the time risk of loss passes, during unloading, delivery, and storage, through construction and after construction. Project Consultant/Final Owner understands that buildings are vulnerable to wind, water damage, and vandalism, before and during construction, and Project Consultant/Final Owner agrees to indemnify and hold Manufacturer harmless for any such damage or costs arising from same.
- 17) All claims for shortages or goods damaged during shipping must be noted on the Bill of Lading to qualify for repair, replacement or reimbursement.
- 18) Inventory must be performed at time of delivery. If inventory is refused then it shall waive project consultant's right for future claims.
- 19) Dummage shall remain the property of the trucking company.
- 20) Storage of materials. All materials, especially non-painted galvalume or galvanized panels must be protected. If this material is allowed to get wet or moisture is permitted to form (condensation) between the materials serious deterioration of the finish will occur. For your protection, if these

materials get wet, separate and dry all materials immediately. Metal shavings left on the panel finish will also cause panel finish deterioration.

- 21) The manufacturer's limited warranty does not provide for weather tightness. It is the ultimate responsibility of the erector to install the building materials in a manner that provides weather tightness. If the contractor / final owner / erector feels a condition exists that does not allow for weather tightness then additional materials or sealant can be requested. The proper amount of downspouts is the final owner's responsibility. All closures shall be installed. Especially at low pitch roof valleys, eave overhangs, valley gutters, sealant should be installed top and bottom of the closure. In some cases, metal closures should be considered at optional pricing. To help prevent water backup under the ends of roof panels, gutters, valleys and valley gutter should be kept clear of ice and snow, by installation of heated devices and/or snow jacks that prevent sliding snow, which are not included in the purchase to the manufacturer.

- 22) The project consultant/final owner is the entity, whether an individual or a company, which orders and purchases the appropriate building materials from the manufacturer for resale. The contractor or erector is the entity hired to construct or supervise construction of metal building materials, and any other construction facets of a building project as determined by the contract between the erector or contractor and the party retaining it. Neither the project consultant/final owner, erector, nor contractor are agents, representatives or employees of the manufacturer. The project consultant/final owner, erector or contractor maintain independent businesses over which the manufacturer has no control.

This is the case even when a final owner has contacted the manufacturer or the service center directly and obtained the names of one or more erectors in an area from whom he may purchase the manufacturer's products. The provision of such names is not a recommendation or guarantee of the skill, ability or good business methods of any given erector.

#### Important notice to bidder for installation of building components

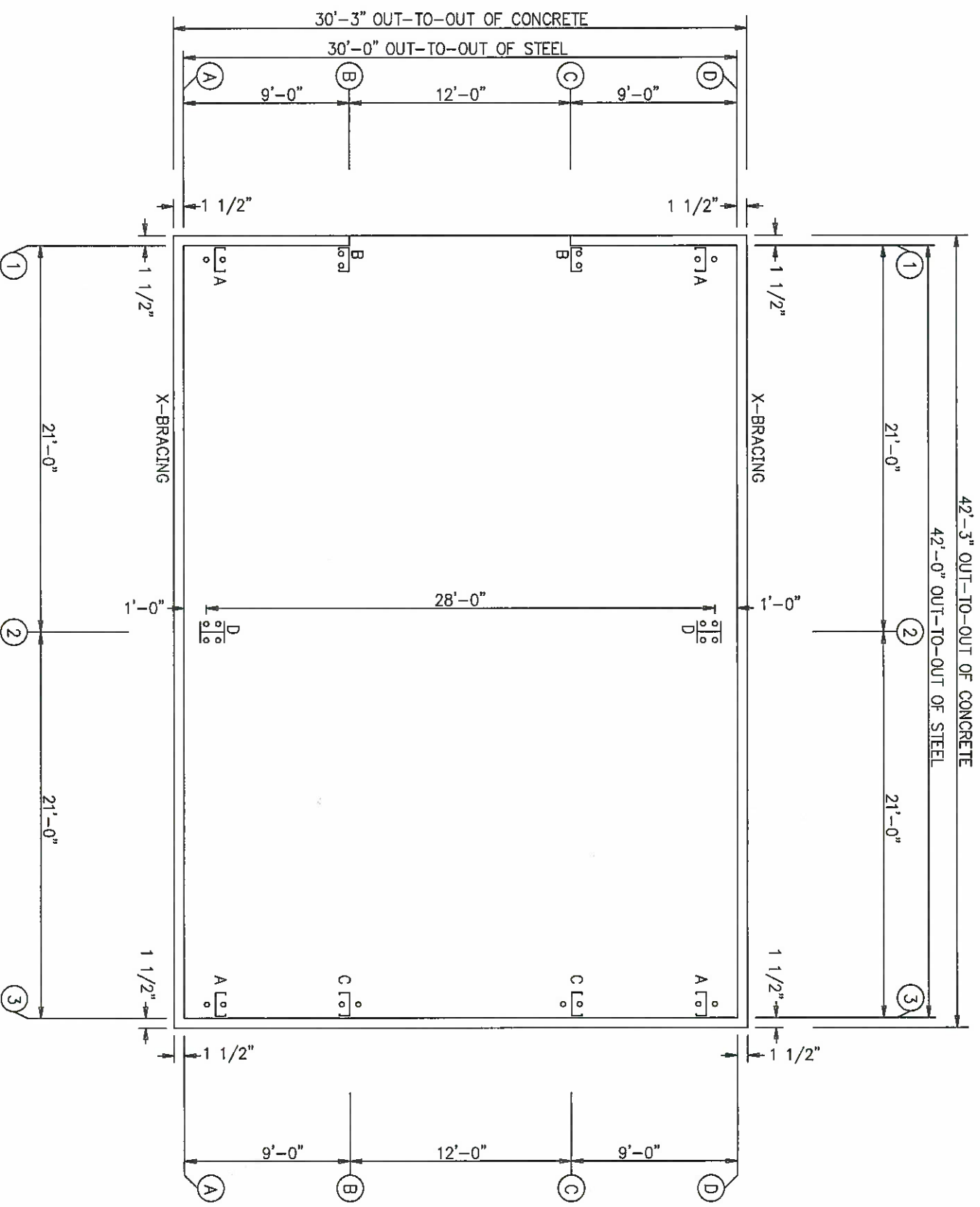
Please be advised when providing a quotation for erection of the material, all accessories to be supplied may not be shown on the permit, approval or erection drawings. Please contact the project consultant/final owner for a complete accessory/option list and/or obtain and compare the manufacturer's verification of the purchase order with the drawings. This includes framed openings and walk-in doors, which in many cases are field located by the erector.

## PROJECT CONSULTANT/FINAL OWNER RESPONSIBILITIES

05/09



SUNWARD CORPORATION  
700 13th Ave. SE  
P.O. Box 110  
Jamestown, ND 58402  
(701) 252-7390



ANCHOR BOLT SETTING PLAN  
NOTE: ALL BASE PLATES AT ELEVATION 100'-0" (UNLESS NOTED)

SHEETING	GA.	TYPE	COLOR	TRIM	COLOR	TRIM	COLOR
ROOF	26	HI-RIB	GA = Galvalume Plus	EAVE	CH = Charcoal Gray	WAINSCOT TRANSITION	
WALL	26	HI-RIB	MG = Ash Gray	GABLE	CH = Charcoal Gray	WAINSCOT CORNER	
WAINSCOT				CORNER	CH = Charcoal Gray	RIDGE CAP/TRIM	GA = Galvalume Plus
EAVE SOFFIT				FRAMED OPENING	CH = Charcoal Gray	SOFFIT - EAVE	
GABLE SOFFIT				BASE	CH = Charcoal Gray	SOFFIT - GABLE	
LINER				GUTTER			
PARTITION				DOWNSPOUT			

MANUFACTURER (ND FACILITY) IS AN APPROVED FABRICATOR WITH THE FOLLOWING CERTIFICATIONS.  
 IAS AC472 # MB-216 & MB-104  
 CSA A660 / CSA W47.1 DIVISION 2  
 CLARK COUNTY, NV / #00205, SAN BERNARDINO COUNTY, CA / #285  
 CITY OF HOUSTON / #729  
 CITY OF LOS ANGELES TYPE 1 FABRICATOR / LWS / HSS / #1015  
 CITY OF PHOENIX / #C17-2022

MANUFACTURER (SC FACILITY) IS AN APPROVED FABRICATOR WITH THE FOLLOWING CERTIFICATIONS.  
 IAS AC472 # MB-216 & MB-105  
 CERTIFICATE OF COMPETENCY: MIAMI-DADE COUNTY / #22-0519.01  
 CITY OF HOUSTON / #729A  
 CITY OF PHOENIX / #C16-2022

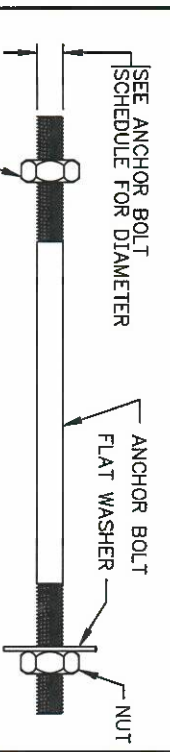
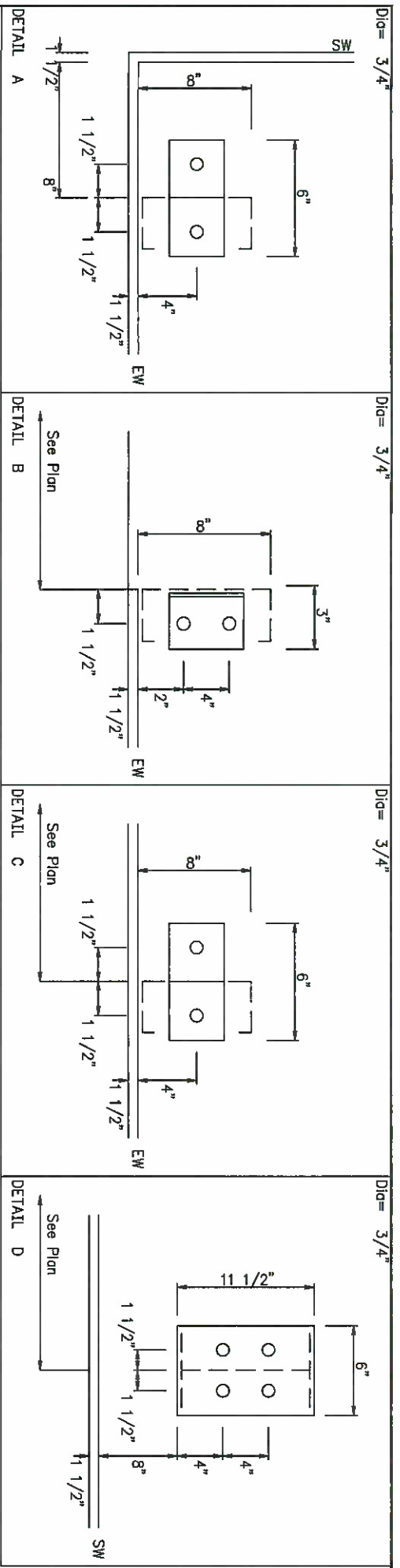
VERIFY WIDTH AND LENGTH DIMENSIONS  
 CHECK YOUR ANCHOR BOLT SETTING PLAN  
 TO MAKE CERTAIN THAT ALL THE  
 DIMENSIONS SHOWN AGREE WITH THE  
 DIMENSIONS ON YOUR SALES ORDER.  
 DIMENSIONS SHOWN ON THE SALES ORDER  
 REFER TO STEEL LINES (OUTSIDE FACE OF  
 GIRTS/FRAMING) OF THE BUILDING.

SEAL  
025679  
SALEM G. SALEM  
ENGINEER  
NORTH CAROLINA PROFESSIONAL  
1/19/23

Sunward Steel Buildings

BUYER: Henry Williams  
 CUST.: Henry Williams  
 SITE: Angler, NC  
 DESCR.: See Elevations  
 SCALE: NONE  
 JOB#: 108554

DRAWN BY: MMM  
 1/9/23  
 CHECK BY: MK  
 1/11/23  
 DES. ENG.:  
 SHEET NO. A1 OF 4



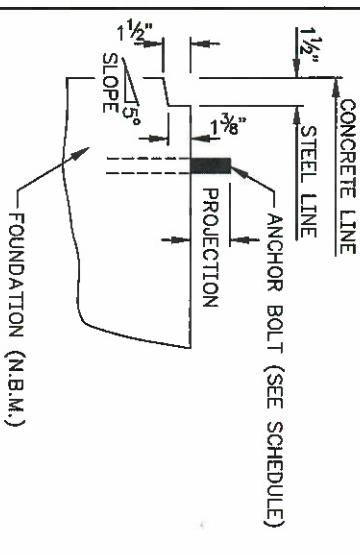
ANCHOR BOLTS, BOLT LENGTHS, NUTS, AND WASHERS ARE NOT BY THE METAL BUILDING MANUFACTURER; SEE GENERAL NOTES.

### ANCHOR BOLT SCHEDULE

Qty	Locate	Diag (in)	Type	Proj (in)
16	Endwall	3/4"	Gr36	2.00
8	Frame	3/4"	Gr36	2.00

### SHEETING NOTCH & BOLT PROJECTION

— OMIT NOTCH AT DOOR OPENING(S) AND AS SHOWN ON ANCHOR BOLT SETTING PLAN.



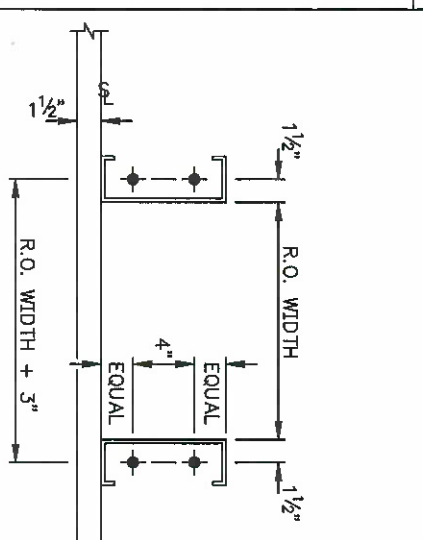
### FIELD LOCATED WALKDOOR DETAIL

DOOR SIZE	3070	4070	6070
R.O. WIDTH	3'-4"	4'-4"	6'-4"
X	3'-7"	4'-7"	6'-7"
Y	3'-1 1/2"	4'-1 1/2"	6'-1 1/2"

— SEE NOTE #3 FOR ANCHOR BOLT REQUIREMENTS.

### FIELD LOCATED WINDOW DETAIL

— USE THIS DETAIL FOR OTHER FRAMED OPENINGS THAT ARE SET ON CONCRETE.  
— SEE NOTE #3 FOR ANCHOR BOLT REQUIREMENTS.



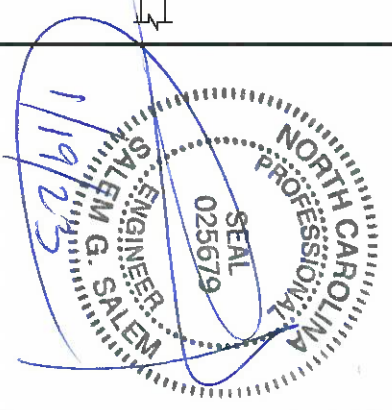
### WALKDOOR AND WINDOW FRAMED OPENING NOTES

- SOME DETAILS SHOWN MAY NOT APPLY TO YOUR BUILDING. REFER TO YOUR SALES ORDER FOR THE OPTIONS WHICH ARE INCLUDED.
- FIELD LOCATE WALKDOOR IN ONE FOOT INCREMENTS STARTING AT STEEL LINE. EXAMPLE: 1'-8 1/2", 2'-8 1/2", 3'-8 1/2", ETC.
- USE (4) 1/2"  $\phi$  EXPANDED ANCHORS OR EQUAL PER OPENING. ANCHORS ARE TO BE DESIGNED AND SUPPLIED BY OTHERS.

### Sunward Steel Buildings

BUYER: Henry Williams  
CUST.: Henry Williams  
SITE: Angier, NC  
DESCR.: See Elevations  
SCALE: NONE  
JOB#: 108554

DRAWN BY: MMM  
1/9/23  
CHECK BY: MK  
1/11/23  
DES. ENG.:  
SHEET NO. A2 OF 4



DETAIL X  
DETAIL Y  
DETAIL Z



**NOTES FOR REACTIONS**

- All loading conditions are examined and only maximum/minimum H or V and the corresponding H or V are reported.
- Positive reactions are as shown in the sketch. Foundation loads are in opposite directions.
- Bracing reactions are in the plane of the brace with the H pointing away from the braced bay. The vertical reaction is downward.
- Building reactions are based on the following building data:
  - Width (ft) = 30
  - Length (ft) = 42
  - Eave Height (ft) = 12 / 12
  - Roof Slope (rise/12) = 1.0:12 / 1.0:12

**DESIGN CODES/LOADS:**

Building Code = IBC 15  
 Local Code (if applicable) = II - Normal  
 Risk Category = 2200  
 Dead Load (psf) = 1  
 Collateral Load (psf) = 20.00  
 Live Load (psf) = No  
 Live Load Reduced? = No

**SNOW LOADS:**

Roof Snow Load (psf), P<sub>f</sub> = 30  
 Ground Snow Load (psf), P<sub>g</sub> = 42.86  
 Importance - Snow = 1.00  
 Snow Exposure, C<sub>e</sub> = 1.00  
 Thermal Factor, C<sub>t</sub> = 1.00  
 Sloped Factor, C<sub>s</sub> = 1.00

**WIND LOADS:**

Wind Speed, Vultimate (mph) = 140  
 Wind Speed, V<sub>50d</sub> (mph) = 106  
 Comp/Cladding, Pressure (psf) = 39.2  
 Comp/Cladding, Suction (psf) = -42.4  
 Importance - Wind = 1.00  
 Wind Exposure = Open  
 Internal Pressure Coeff. = Closed / -0.18

**SEISMIC INFORMATION:**

Seismic, S<sub>s</sub> = 0.171  
 Seismic, S<sub>1</sub> = 0.082  
 Seismic, S<sub>d1</sub> = 0.182  
 Importance - Seismic = 1.00  
 Seismic Response Coeff. C<sub>s</sub> = 0.061  
 Response Modification Coeff. R = 3  
 Longitudinal Base Shear (kips) = 0.51  
 Transverse Base Shear (kips) = 0.56  
 Site Class = D  
 Analysis Procedure = B

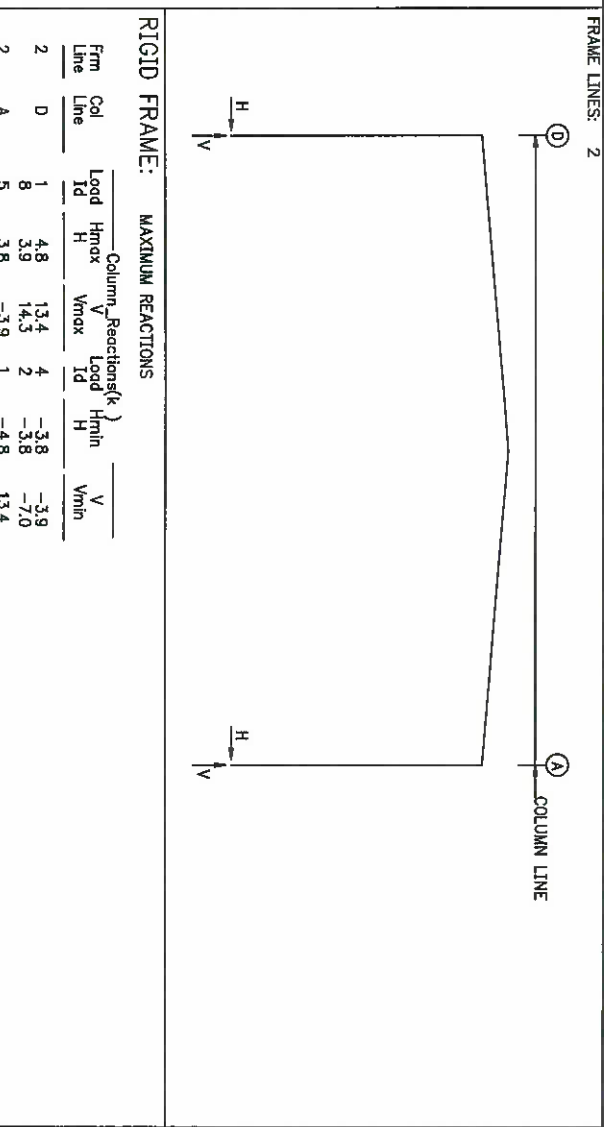
**5. Loading conditions are:**

Equivalent Lateral Force  
 Seismic Force Resisting Systems:  
 Steel Ordinary Moment Resisting Frame (OMRF)  
 Steel Ordinary Moment Resisting Frame (OCBF)

- Dead+Collateral+Snow
- 0.6Dead+0.6Wind\_Left1
- 0.6Dead+0.6Wind\_Right1
- 0.6Dead+0.6Wind\_Left2
- 0.6Dead+0.6Wind\_Right2
- 0.6Dead+0.6Wind\_Long1L
- 0.6Dead+0.6Wind\_Long1R
- 0.6Dead+0.6Wind\_Long2L
- 0.6Dead+0.6Wind\_Long2R
- 0.6Dead+0.6Wind\_Long1L
- 0.6Dead+0.6Wind\_Long1R
- 0.6Dead+0.6Wind\_Long2L
- 0.6Dead+0.6Wind\_Long2R
- 0.6Dead+0.6Wind\_Long1L
- 0.6Dead+0.6Wind\_Long1R
- 0.6Dead+0.6Wind\_Long2L
- 0.6Dead+0.6Wind\_Long2R
- 0.6Dead+0.6Wind\_Long1L
- 0.6Dead+0.6Wind\_Long1R
- 0.6Dead+0.6Wind\_Long2L
- 0.6Dead+0.6Wind\_Long2R

**ENDWALL COLUMN:**

Frm Line	Col Line	Dead Vert	Wind Long1 Vert	Wind Long2 Vert	Collat Vert	Live Vert	Seis Long1 Vert	Seis Long2 Vert	Seis Collat Vert	Snow Vert	MAXIMUM REACTIONS					
											MIN-SNOW--	EJUNB-SL-L-	EJUNB-SL-R-	MIN-SNOW--		
		Horz	Vert	Horz	Vert	Horz	Vert	Horz	Vert	Horz	Vert	Horz	Vert	Horz	Vert	
1	A	0.1	-0.7	-0.7	0.0	0.6	0.0	0.0	0.0	0.8	-0.3	0.0	-0.1	0.0	0.0	0.0
1	B	0.4	-4.6	-3.1	0.0	2.7	0.0	0.0	0.0	4.0	-0.3	0.0	0.0	0.0	0.0	0.0
1	C	0.4	-4.6	-3.1	0.0	2.7	0.0	0.0	0.0	4.0	-0.3	0.0	0.0	0.0	0.0	0.0
3	D	0.1	-0.7	-0.7	0.0	0.6	0.0	0.0	0.0	0.8	-0.3	0.0	-0.1	0.0	0.0	0.0



**RIGID FRAME: MAXIMUM REACTIONS**

Frm Line	Col Line	Load Id	Hmax	Vmax	Load Id	Hmin	Vmin
2	D	1	4.8	13.4	4	-3.8	-3.9
2	A	8	3.9	14.3	2	-3.8	-7.0
2	A	5	3.8	-3.9	1	-4.8	13.4
2	A	9	-3.9	14.3	3	3.8	-7.0

**RIGID FRAME: BASIC COLUMN REACTIONS (k)**

Frame Line	Column	Dead	Collateral	Live	Snow	Wind Left1	Wind Right1	Wind Left2	Wind Right2	Wind Long1	Wind Long2	Wind Long1	Wind Long2	Wind Long1	Wind Long2
2	D	0.4	1.2	0.1	0.4	-2.8	7.9	-4.2	11.8	-0.8	-7.4	6.7	-12.9	6.7	-12.9
2	A	-0.4	-0.1	0.4	-2.8	-6.7	-12.9	-7.4	11.8	0.1	0.1	0.1	0.1	0.1	0.1

**BUILDING BRACING REACTIONS**

Well Line	Col Line	± Reactions(k)	Panel Shear (lb/ft)
1	A	1.2	2.6
3	D	2.1	2.6

**± Reactions(k)**

Well Line	Col Line	Wind	Seismic	Wind	Seis
1	A	1.2	2.6	1.3	0.3
3	D	2.1	2.6	1.3	0.3

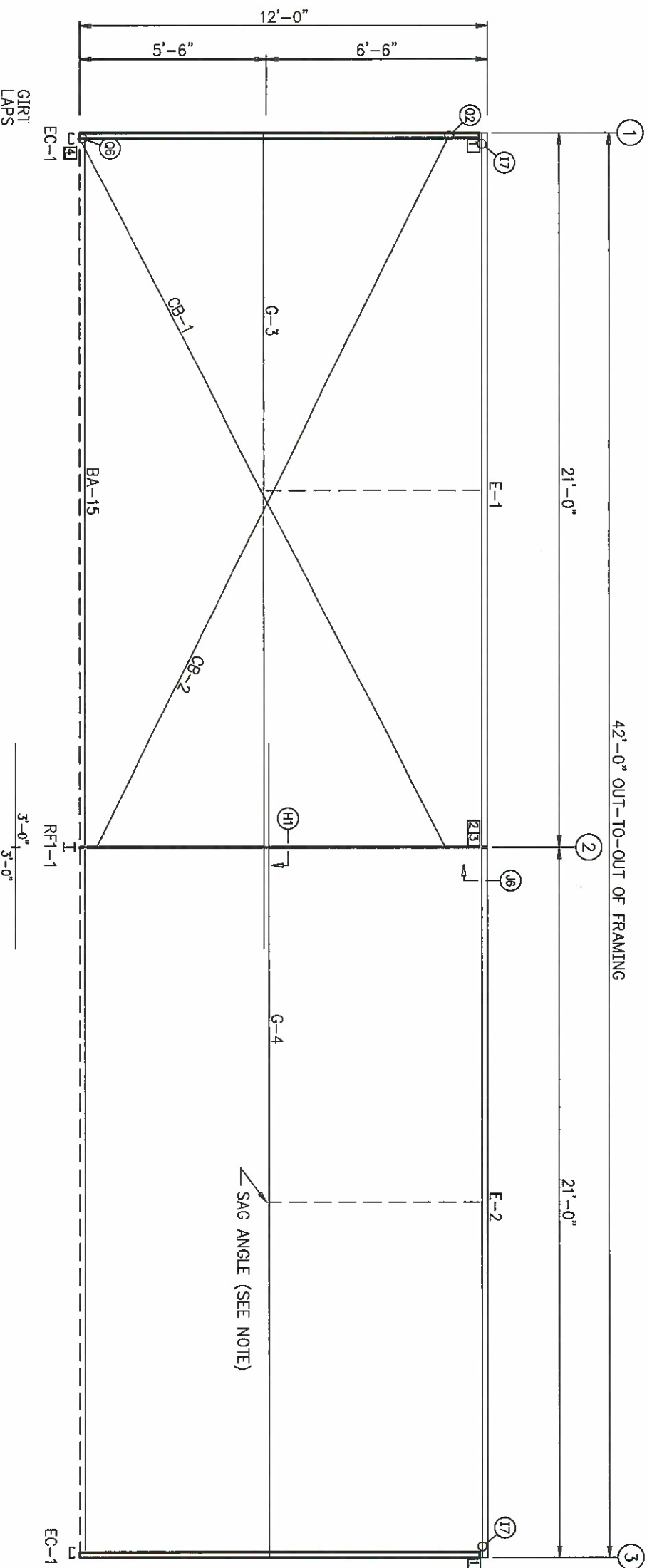
## Sunward Steel Buildings

BUYER: Henry Williams	DRAWN BY: MM
CUST.: Henry Williams	DATE: 1/9/23
SITE: Angier, NC	CHECK BY: MK
DESCR.: See Elevations	DES. ENG.: _____
SCALE: NONE	JOB#: 108554
SHEET NO. A4 OF 4	

MEMBER TABLE	
FRAME LINE A	PART
E-1	10C16
E-2	10C16
G-3	8216
G-4	8216
CB-1	5/16" CABLE
CB-2	5/16" CABLE

CONNECTION PLATES	
FRAME LINE A	MARK/PART
1	FC065
2	FC060
3	ESA-1
4	FC015



ELEVATION AT: FRAME LINE A

LEGEND	
A-	SPECIAL ANGLE
AB-	ANGLE BRACE
BA-	BASE/SHEETING ANGLE
BCH-	BASE CHANNEL
BM-	BEAM
BR-	BRACKET
BS-	BOSS
CB-	CROSS BRACE
CL-	SPECIAL CLIP
DH-	DOOR HEADER
DJ-	DOOR JAMB
E-	EAVE STRUT
EE-	EAVE EXTENSION
EB-	EXTENSION BEAM
EC-	ENDWALL COLUMN
ER-	ENDWALL RAFTER
FB-	FLANGE BRACE
FC-	FRAMING CLIP
G-	GIRT
H-	HEADER/SILL
J-	JAMB
MB-	MEZZANINE BEAM
MC-	MEZZANINE/MANSARD COLUMN
MJ-	MEZZANINE JOIST
P-	PURLIN
PC-	PIPE/PARAPET COLUMN
PS-	PURLIN/PIPE STRUT
R-	RAFTER
RB-	RAKE BEAM
RCH-	RAKE CHANNEL
RF-	RIGID FRAME
SA-	SHEETING ANGLE
SC-	SIDEWALL/STUB/SOLDER COLUMN
SJ-	SUBJAMB
SR-	SUPPORT RAFTER
T-	TRIM
TC-	TUBE COLUMN
TR-	SPECIAL TRIM
TS-	TUBE STRUT
WF-	WIND FRAME
ZA-	"Z" SHEETING ANGLE
A.F.F.	ABOVE FINISH FLOOR
A.S.	AS SHOWN
B	BUILDING LINE
CL	CENTER LINE
F.F.	FINISH FLOOR
F.O.	FRAMED OPENING
F.O.C.	FACE OF COLUMN
F.S.	FAR SIDE
N.A.	NOT APPLICABLE
N.B.M.	NOT BY METAL BUILDING MANUFACTURER
N.S.	NEAR SIDE
O.C.	ON CENTER
O.H.	OPPOSITE HAND
R.O.	ROUGH OPENING
SIM.	SIMILAR
\$	STEEL LINE
T.B.D.	TO BE DETERMINED
T.O.B.	TOP OF BEAM
T.O.J.	TOP OF JOIST
TYP.	TYPICAL
U.N.	UNLESS NOTED

**OVERHEAD DOOR NOTE:**  
 BUILDING IS DESIGNED TO HAVE ADEQUATE HEADROOM FOR A STANDARD LIFT SECTIONAL DOOR. UNLESS NOTED OTHERWISE ON THE DRAWINGS, IF USING ANY OTHER TYPE OF DOOR (FOR EXAMPLE: HYDRAULIC, BI-FOLD, SLIDING, COIL/ROLL-UP, ETC.) THEN PLEASE PROVIDE REQUIRED HEADROOM TO ENSURE PROPER DOOR CLEARANCES.

**SAG ANGLE NOTES:**  
 (MARK: PBA-10, SIZE: 1"x1"x16 GAGE)  
 IF SHOWN, LOCATE PBA-10 AS INDICATED ON DRAWINGS. ONE ROW IS AT MIDPOINT OF BAY, TWO ROWS ARE AT 1/3 POINTS OF BAY, THREE ROWS ARE AT 1/4 POINTS OF BAY.

**Sunward Steel Buildings**

BUYER: Henry Williams  
 CUST.: Henry Williams  
 SITE: Angler, NC  
 DESCR.: See Elevations  
 SCALE: NONE  
 JOB#: 108554

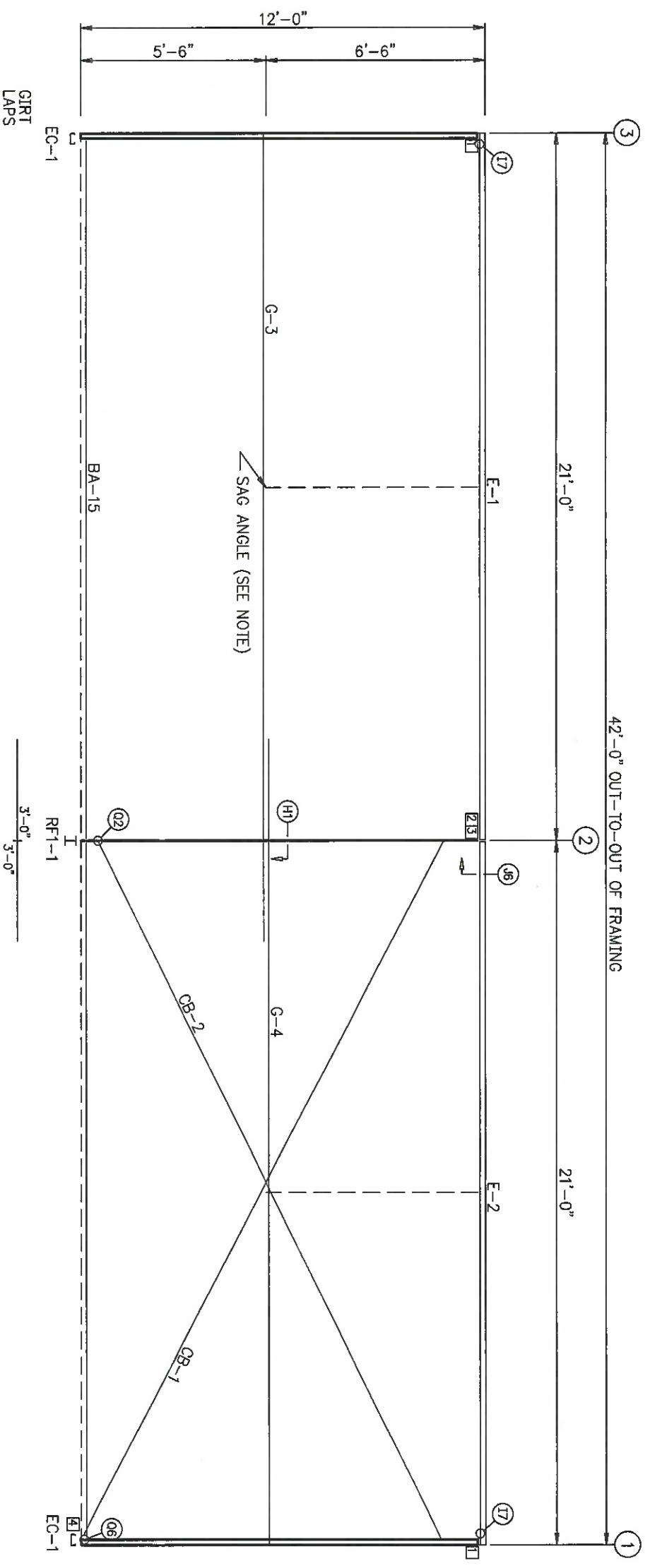
DRAWN BY: MMM  
 1/9/23  
 CHECK BY: \_\_\_\_\_  
 DES. ENG.: \_\_\_\_\_  
 SHEET NO. E1 OF 8



MEMBER TABLE	
FRAME LINE D	PART
E-1	10C16
E-2	10C16
G-3	8216
G-4	8216
CB-1	5/16" CABLE
CB-2	5/16" CABLE

CONNECTION PLATES	
FRAME LINE D	TID MARK/PART
1	FC065
2	FC060
3	ESA-1
4	FC015



ELEVATION AT: FRAME LINE D

**OVERHEAD DOOR NOTE:**  
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 (MARK: PBA-10, SIZE: 1"x1"x16 GAGE)  
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**Sunward Steel Buildings**

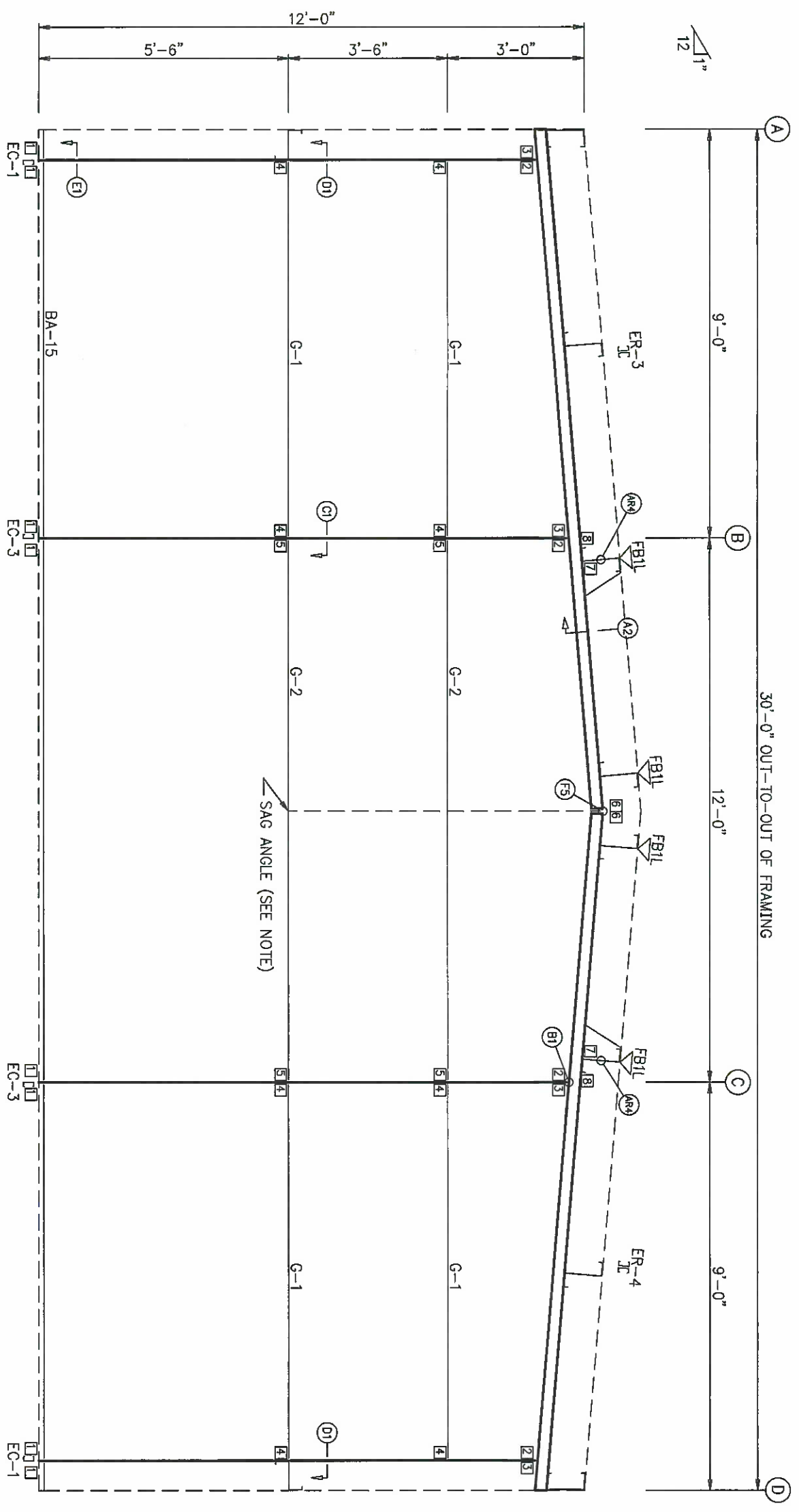
BUYER : Henry Williams  
 CUST. : Henry Williams  
 SITE : Angier, NC  
 DESGR. : See Elevations  
 SCALE : NONE  
 JOB# : 108554

DRAWN BY: MMM  
 1/9/23  
 CHECK BY:  
 DES. ENG. :  
 SHEET NO. E2 OF 8



FLANGE BRACE TABLE	
LINE 3	LENGTH
VID PART	14 3/4"
FBIL	

30'-0" OUT-TO-OUT OF FRAMING



ELEVATION AT: LINE 3

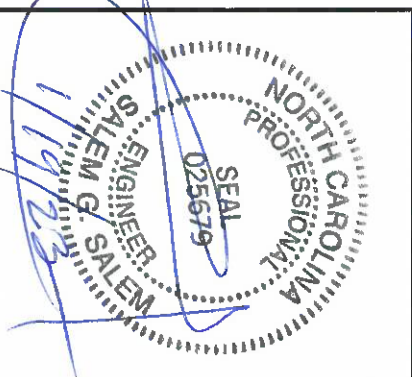
CONNECTION PARTS	
ID	PART
1	FC013
2	FC126
3	FC125
4	FC033
5	FC030
6	FC136
7	FC008
8	FC130

MEMBER TABLE	
PART	MATERIAL
EC-1	8C16
EC-3	8C16
ER-3	8D16
ER-4	8D16
G-1	8Z16
G-2	8Z16

**OVERHEAD DOOR NOTE:**  
 BUILDING IS DESIGNED TO HAVE ADEQUATE HEADROOM FOR A STANDARD LIFT SECTIONAL DOOR, UNLESS NOTED OTHERWISE ON THE DRAWINGS. IF USING ANY OTHER TYPE OF DOOR (FOR EXAMPLE: HYDRAULIC, BI-FOLD, SLIDING COIL/ROLL-UP, ETC.) THEN PLEASE PROVIDE REQUIRED HEADROOM TO ENSURE PROPER DOOR CLEARANCES.

**SAG ANGLE NOTES:**  
 (MARK: PBA-10, SIZE: 1"x1"x16 GAGE)  
 IF SHOWN, LOCATE PBA-10 AS INDICATED ON DRAWINGS. ONE ROW IS AT MIDPOINT OF BAY, TWO ROWS ARE AT 1/3 POINTS OF BAY, THREE ROWS ARE AT 1/4 POINTS OF BAY.



**Sunward Steel Buildings**

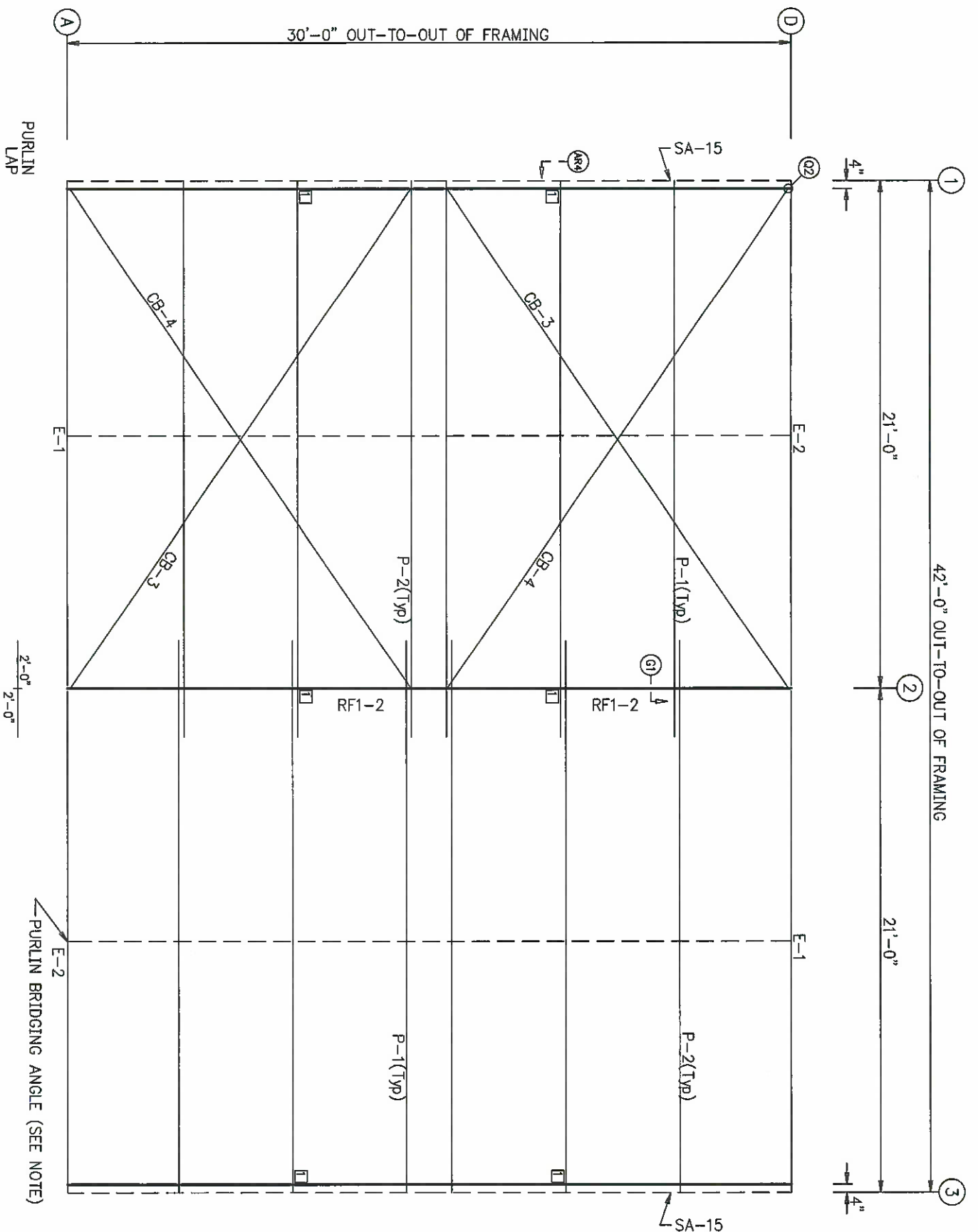
BUYER: Henry Williams  
 CUST: Henry Williams  
 SITE: Angier, NC  
 DESCR: See Elevations  
 SCALE: NONE  
 JOB#: 108554

DRAWN BY: MMM  
 1/9/23  
 CHECK BY:  
 DES. ENG.:  
 SHEET NO. E4 OF 8

MEMBER TABLE	
MARK	PART
P-1	10Z14
P-2	10Z14
E-1	10C16
E-2	10C16
CB-3	5/16" CABLE
CB-4	5/16" CABLE

CONNECTION PLATES	
MARK	PART
RF1-2	10C16

ROOF PLAN	
ID	MARK/PART
1	FC008



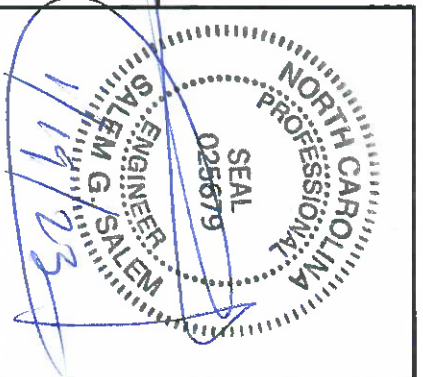
ROOF FRAMING PLAN

PURLIN CLIP NOTES:

- 1) PURLIN CLIP(S) AS REQUIRED, SEE ROOF FRAMING PLAN.
- 2) SEE DETAIL SECTIONS "A" ON ENDWALL ELEVATIONS FOR PURLIN TO RAFTER DETAILS.
- 3) LOCATE PURLIN CLIP INSIDE OF ROOF PURLIN.

PURLIN BRIDGING ANGLE NOTES:

(MARK: PBA-10, SIZE: 1"x1"x16 GAGE)  
 IF SHOWN, LOCATE PBA-10 AS INDICATED ON DRAWINGS. ONE ROW IS AT MIDPOINT OF BAY, TWO ROWS ARE AT 1/3 POINTS OF BAY, THREE ROWS ARE AT 1/4 POINTS OF BAY.

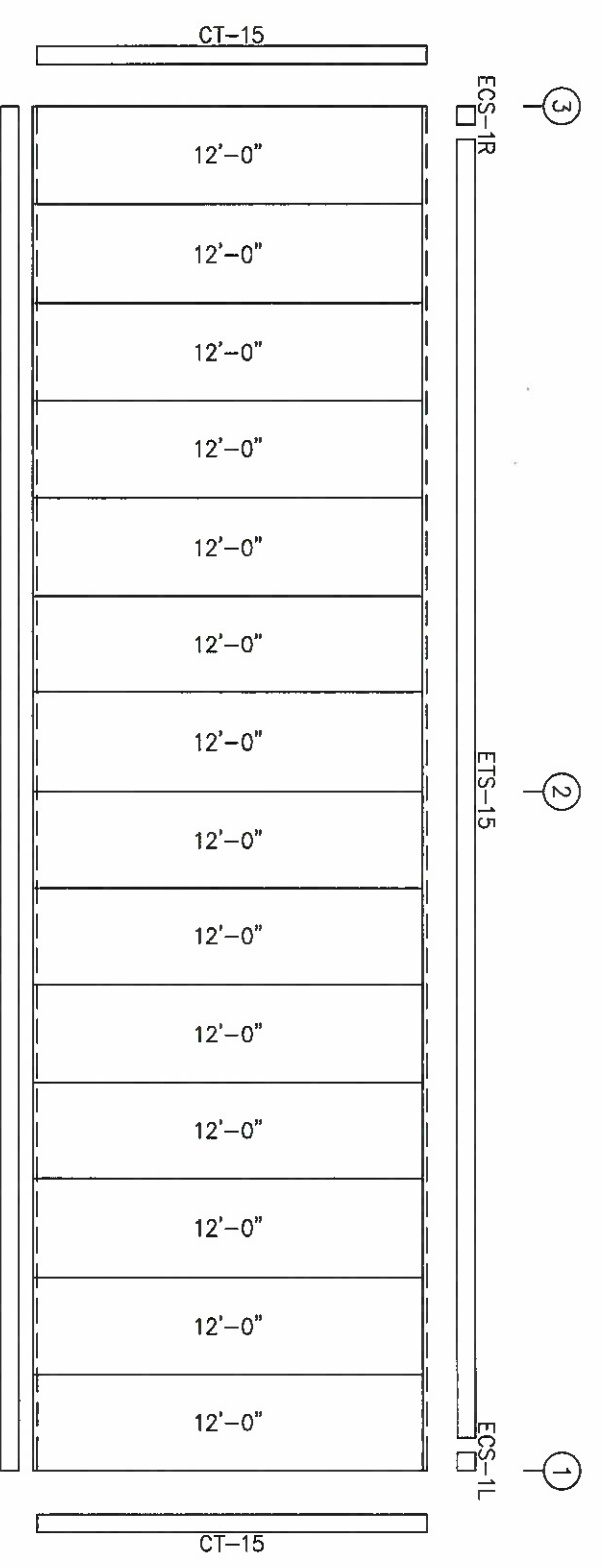
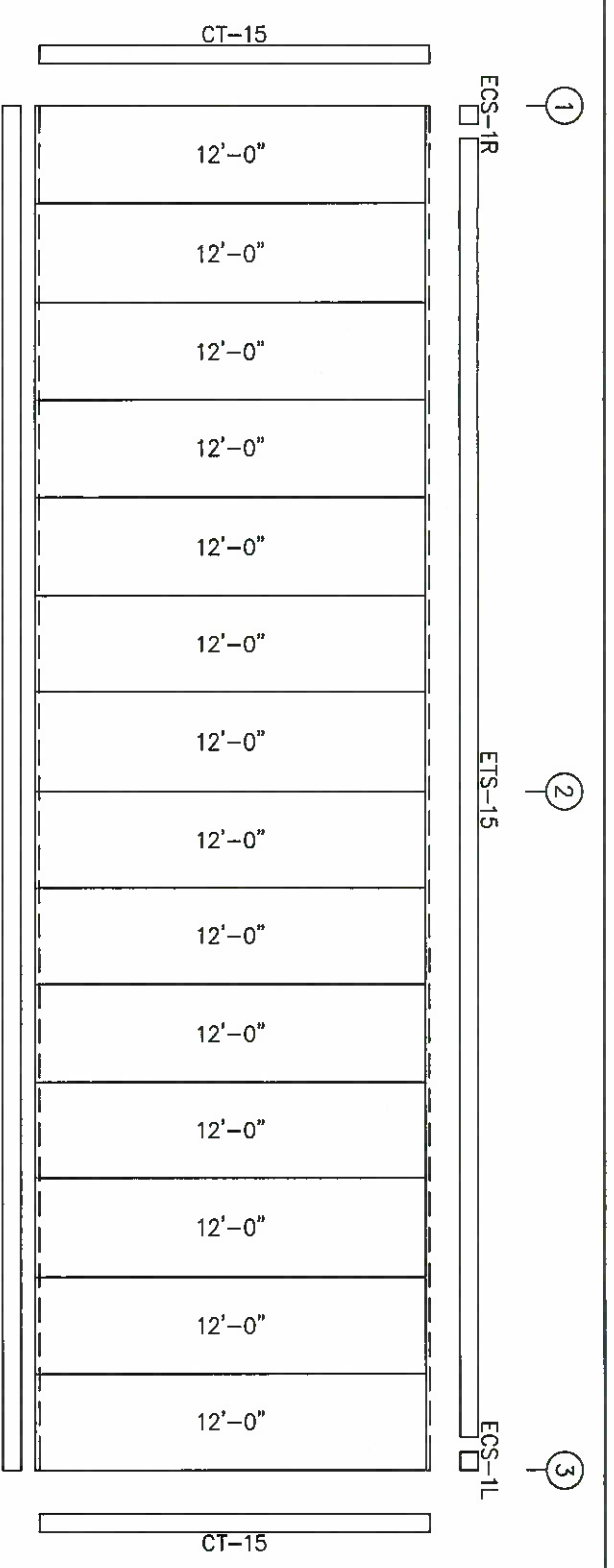


Sunward Steel Buildings

BUYER : Henry Williams  
 CUST. : Henry Williams  
 SITE : Angier, NC  
 DESCR. : See Elevations  
 SCALE : NONE  
 JOB# : 108554

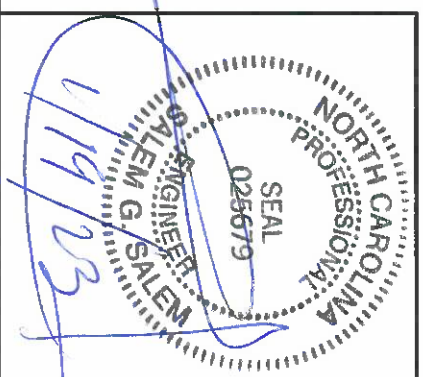
DRAWN BY: MMM  
 1/9/23  
 CHECK BY:  
 DES. ENG. :  
 SHEET NO. E5 OF 8

TRIM TABLE			
FRAME LINE A & D			
ID	PART	LENGTH	DETAIL
ETS-15		182"	TRIM_1
ECS-1R			TRIM_80
ECS-1L		182"	TRIM_80
CT-15		182"	TRIM_30
BT-15		182"	TRIM_5



**IMPORTANT NOTE!**  
TRIM OVERLAP TO BE 1 1/2" (MAXIMUM). REFER TO PAGE 32 OF THE BUILDING ERECTION MANUAL.

- SHEETTING NOTES:**
- 1) WALL SHEETS TO BE FIELD CUT AT FRAMED OPENINGS AS REQUIRED.
  - 2) ROOF PITCHES GREATER THAN 1:12 REQUIRE WALL SHEETS TO BE FIELD CUT AT THE SLOPE OF BUILDING.

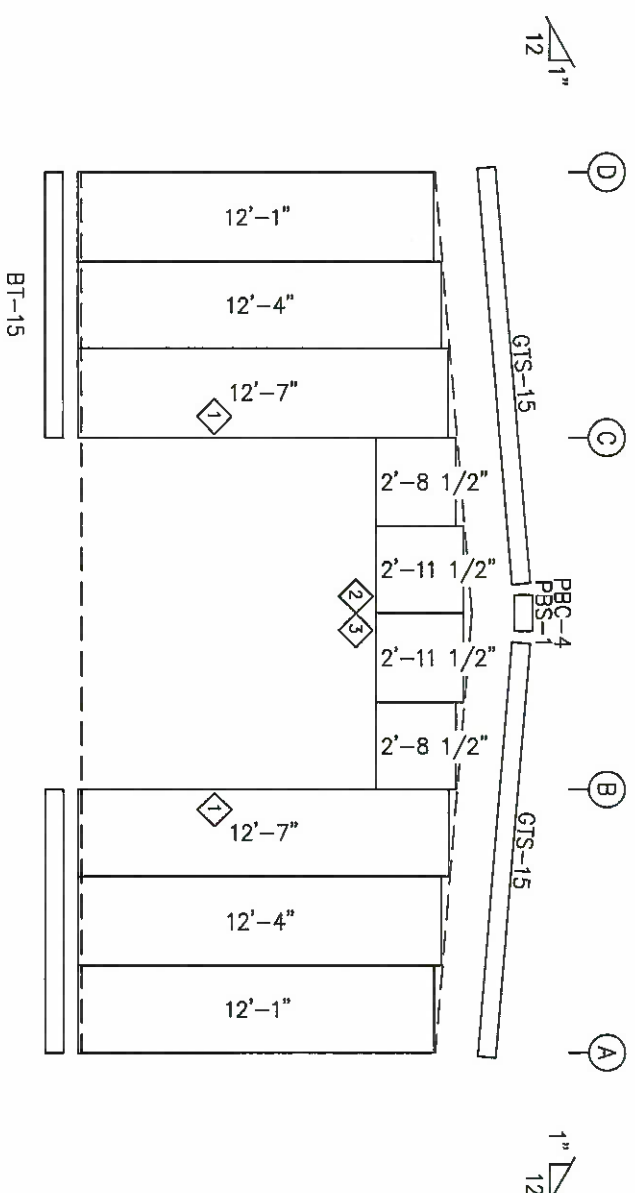


**Sunward Steel Buildings**

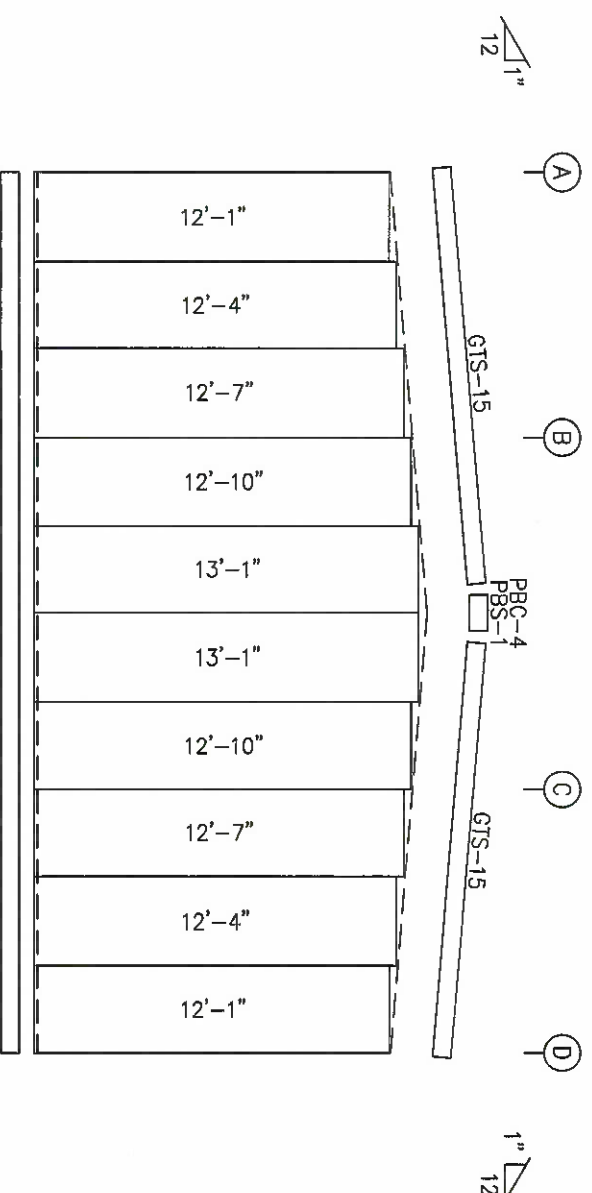
BUYER: Henry Williams  
CUST.: Henry Williams  
SITE: Angler, NC  
DESCR.: See Elevations  
SCALE: NONE  
JOB#: 108554

DRAWN BY: MMM  
1/9/23  
CHECK BY: \_\_\_\_\_  
DES. ENG.: \_\_\_\_\_  
SHEET NO. E6 OF 8

TRIM TABLE			LINE 1 & 3	
ID	MATERIAL	LENGTH	DETAIL	
	GTS-15	182"	TRIM_7	
	PBS-1	182"	TRIM_8	
	BT-15	122"	TRIM_5	
1	JT-108	182"	TRIM_10	
2	HDT-15	182"	TRIM_9	
3	HT-158	182"	TRIM_9	



ELEVATION AT: LINE 1  
26 Ga. HR



ELEVATION AT: LINE 3  
26 Ga. HR

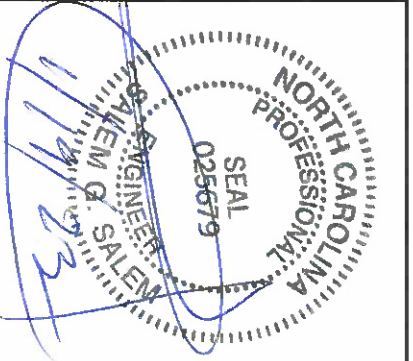
**IMPORTANT NOTE!**  
TRIM OVERLAP TO BE 1/2" (MAXIMUM). REFER TO PAGE 32 OF THE BUILDING ERECTION MANUAL.

- SHEETING NOTES:**
- 1) WALL SHEETS TO BE FIELD CUT AT FRAMED OPENINGS AS REQUIRED.
  - 2) ROOF PITCHES GREATER THAN 1:12 REQUIRE WALL SHEETS TO BE FIELD CUT AT THE SLOPE OF BUILDING.

Sunward Steel Buildings

BUYER: Henry Williams  
CUST.: Henry Williams  
SITE: Angler, NC  
DESCR.: See Elevations  
SCALE: NONE  
JOB#: 108554

DRAWN BY: MMM  
1/9/23  
CHECK BY: \_\_\_\_\_  
DES. ENG.: \_\_\_\_\_  
SHEET NO. E7 OF 8



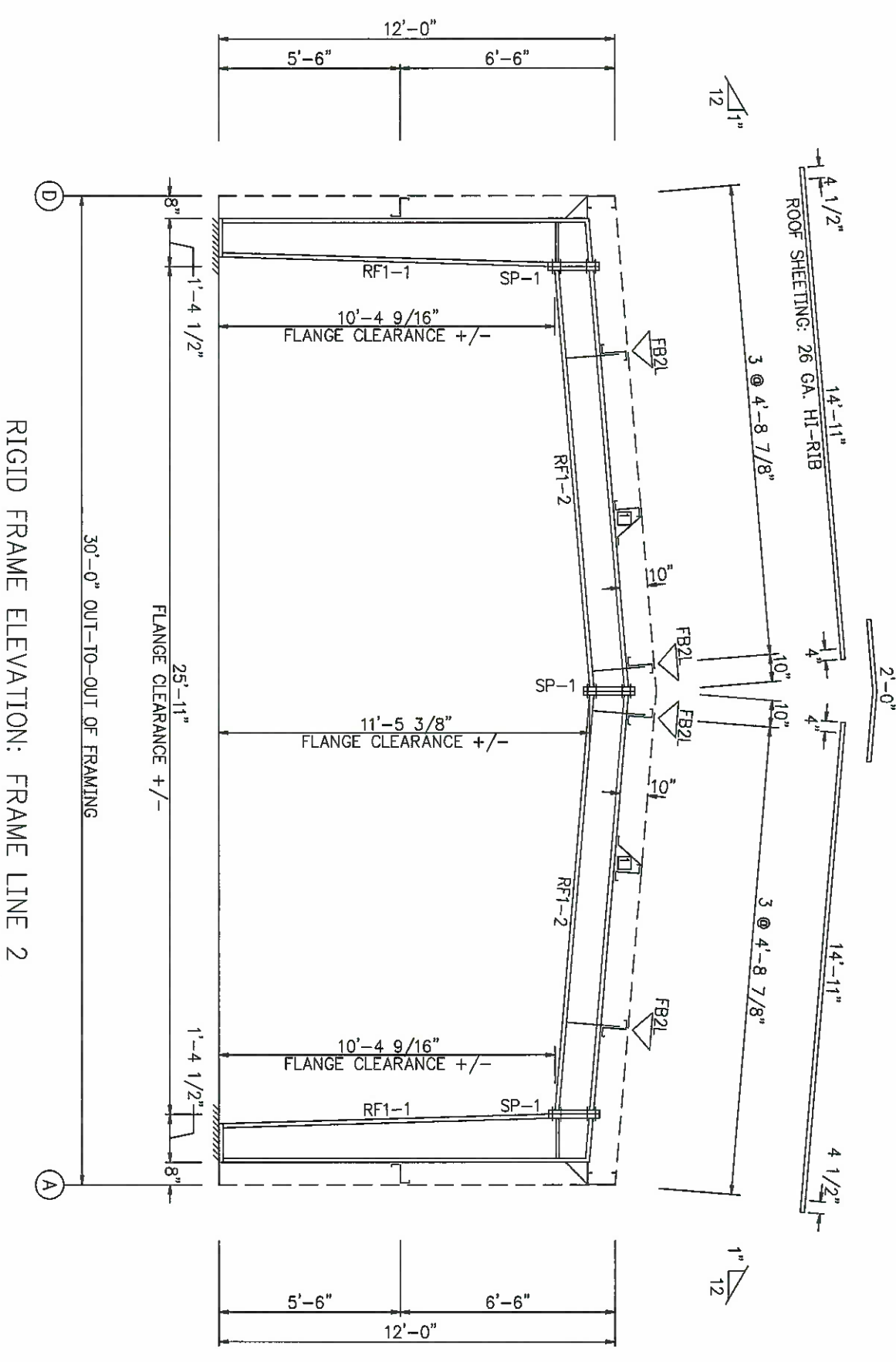
SPICE PLATE & BOLT TABLE									
Mark	Qty	Top	Bot	Int Type	Dia	Length	Width	Thick	Length
SP-1	4	4	0	A325	3/4"	2"	6"	1/2"	1'-5 5/16"

FLANGE BRACES: BOTH SIDES (U.N.) OR  
PIECE MARK FOLLOWED BY (1) = 1 SIDE ONLY

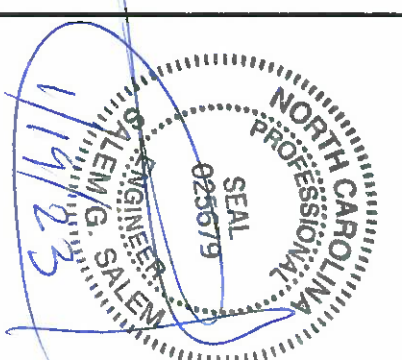
FBXL = 1 1/2" x 1 1/2" x 1/8" H.R. ANGLE

MEMBER TABLE						
Mark	Web Depth	Start/End	Web Thick	Web Plate Length	Outside Flange W x Thk x Length	Inside Flange W x Thk x Length
RF1-1	11.0/15.0	15.0/16.0	11 ga.	8'-1 1/8"	5 x 1/4" x 11'-1 7/8"	5 x 1/4" x 10'-1 3/16"
RF1-2	16.0/16.0	11.0/11.0	11 ga.	2'-0"	5 x 1/4" x 1'-4 5/16"	5 x 1/4" x 12'-10 3/4"

CONNECTION PLATES		
ID	Mark/Part	
1	FC008	



RIGID FRAME ELEVATION: FRAME LINE 2



Sunward Steel Buildings

BUYER: Henry Williams  
DRAWN BY: MMM  
1/9/23

CUST.: Henry Williams  
CHECK BY: \_\_\_\_\_

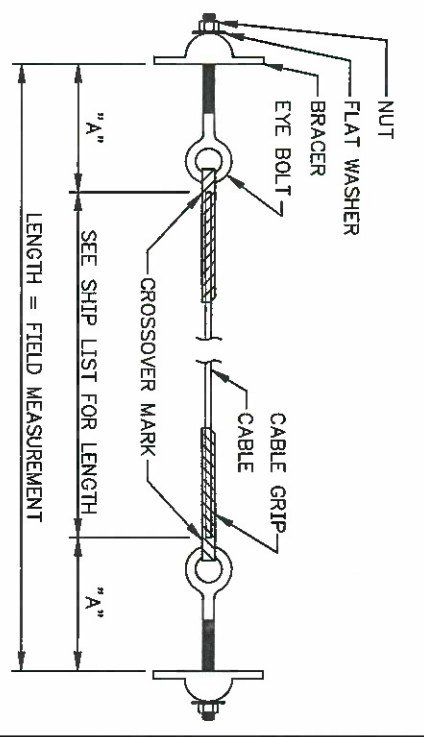
SITE: Angler, NC  
DESIGN: See Elevations  
DES. ENG.: \_\_\_\_\_

SCALE: NONE  
SHEET NO. E8 OF 8

JOB#: 108554

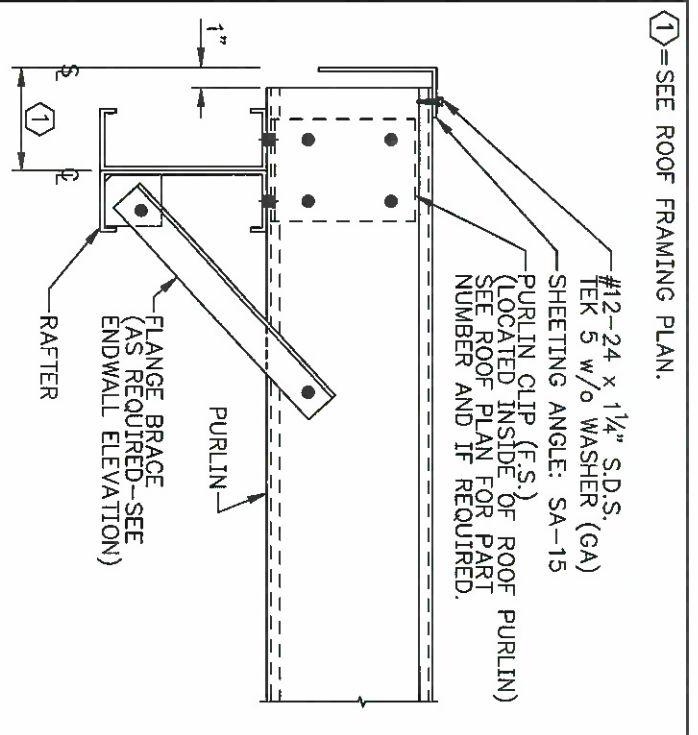
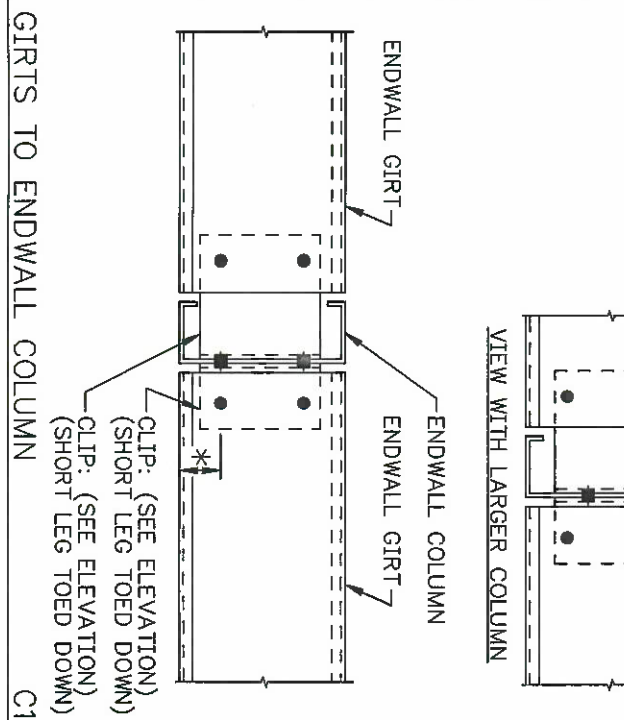
REFERENCE CHART

CABLE	5/16"	3/8"	1/2"
EYE BOLT	5/8"	3/4"	7/8"
"A" DIM.	9"	10"	12"



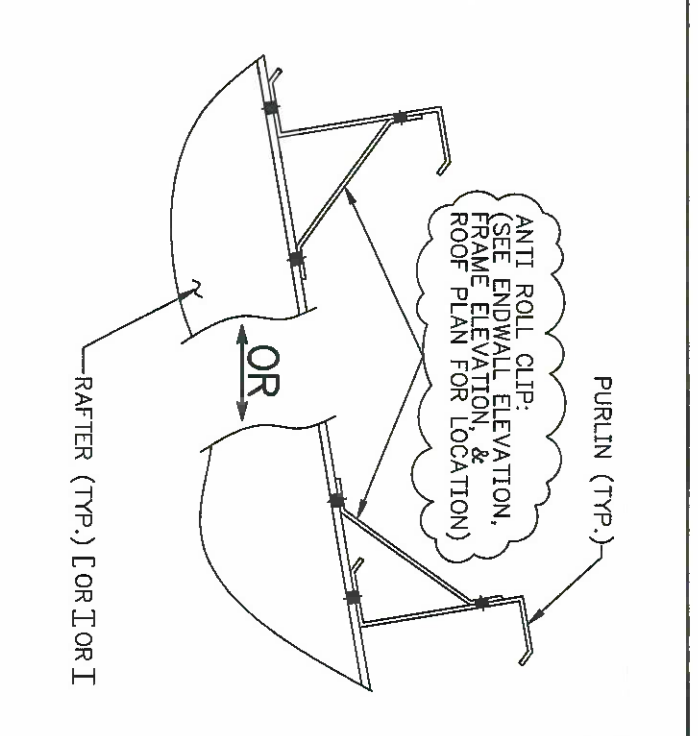
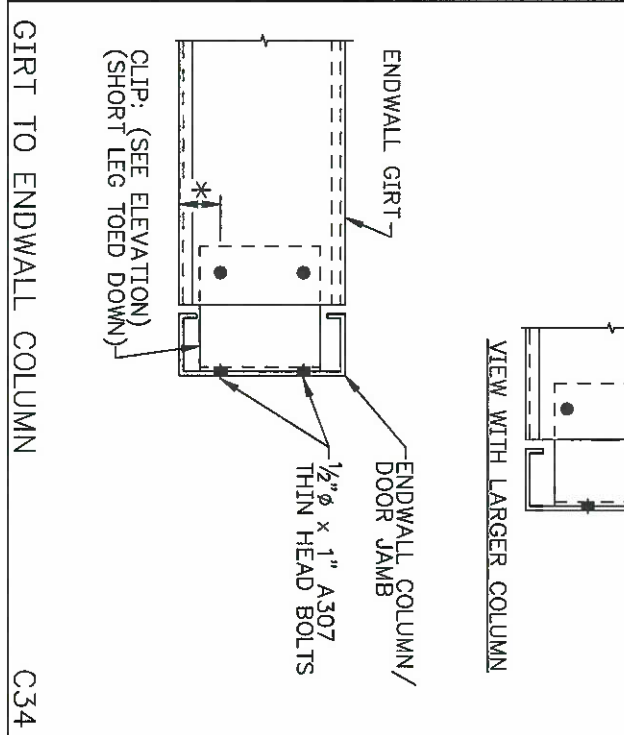
CABLE BRACING ASSEMBLY

GIRT SIZE(S) * DIM.	
8" C or Z	2"
10" C or Z	3"
12" C or Z	4"



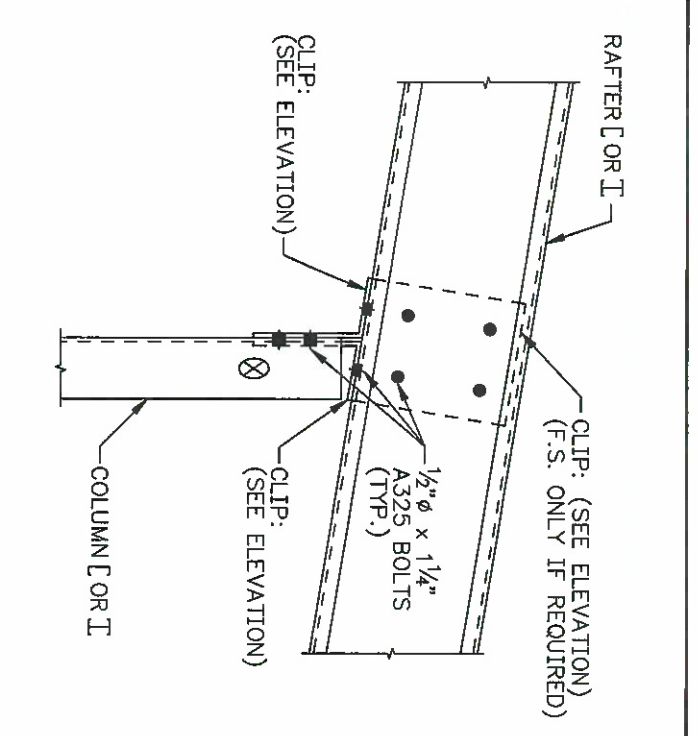
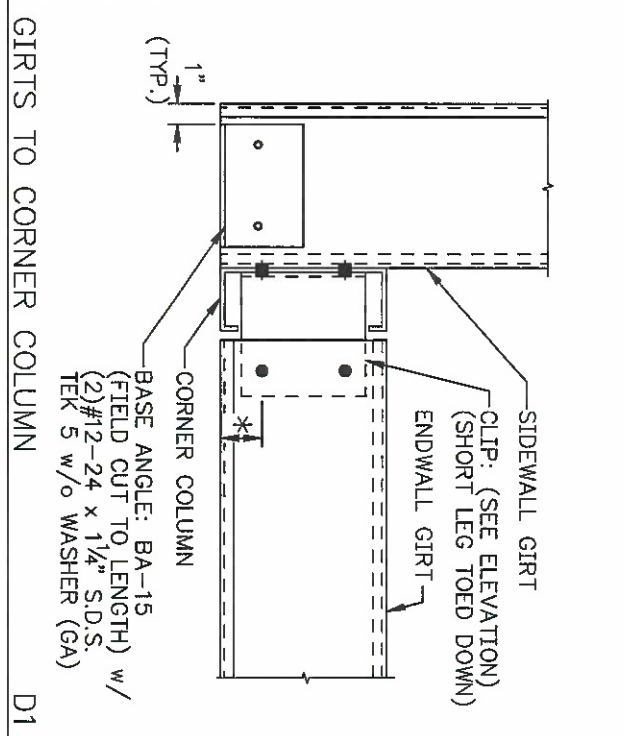
PURLIN TO RAFTER

GIRT SIZE(S) * DIM.	
8" C or Z	2"
10" C or Z	3"
12" C or Z	4"



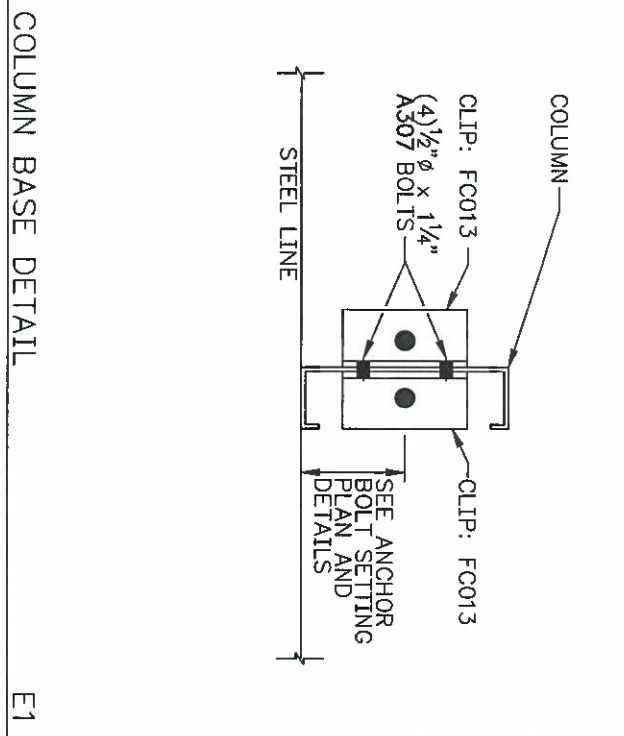
ANTI-ROLL CLIP

GIRT SIZE(S) * DIM.	
8" C or Z	2"
10" C or Z	3"
12" C or Z	4"

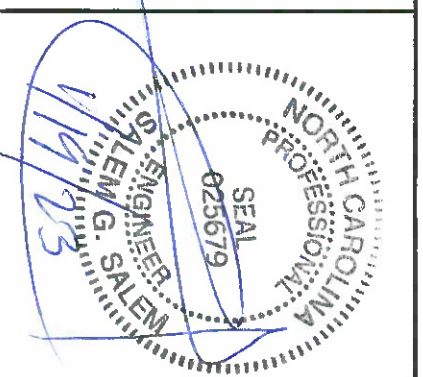


COLUMN TO RAFTER

GIRT SIZE(S) * DIM.	
8" C or Z	2"
10" C or Z	3"
12" C or Z	4"



- GENERAL NOTES:
- 1) ALL BOLTS ARE TO BE 1/2"  $\phi$  x 1 1/4" A307 UNLESS NOTED.
  - 2) VIEW IS FROM OUTSIDE OF THE BUILDING UNLESS NOTED.
  - 3) ALL DIMENSIONS ARE +/-.
  - 4) MATCH SHOP MARK "X" IF SHOWN.
  - 5) SEE ELEVATIONS AND PLANS FOR MEMBER SIZE(S). THE DETAILS SHOWN MAY NOT INDICATE ACTUAL SIZE.
  - 6) SEE RIGID FRAME ELEVATION(S) FOR PURLIN AND GIRT ORIENTATION.
  - 7) FRAMING CLIPS ARE TYPICALLY TOED DOWN UNLESS NOTED ON THE DRAWINGS.



Sunward Steel Buildings

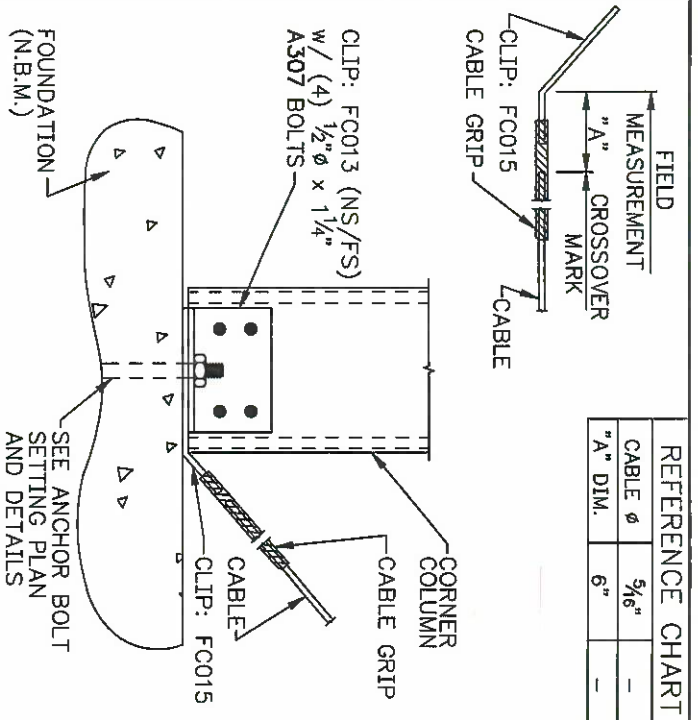
BUYER: Henry Williams  
 CUST.: Henry Williams  
 SITE: Angler, NC  
 DESCR.: See Elevations  
 SCALE: NONE  
 JOB#: 108554

DRAWN BY: MMM  
 CHECK BY: 1/9/23  
 DES. ENG.:  
 SHEET NO. G1 OF 5



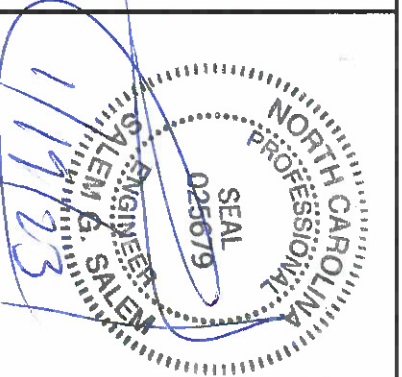
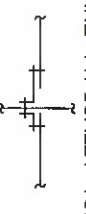


REFERENCE CHART		
CABLE $\phi$	$\frac{5}{8}$ "	-
"A" DIM.	6"	-



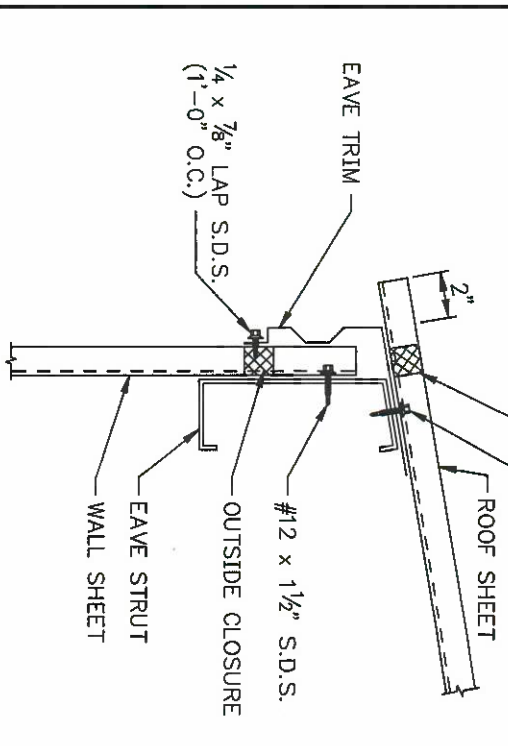
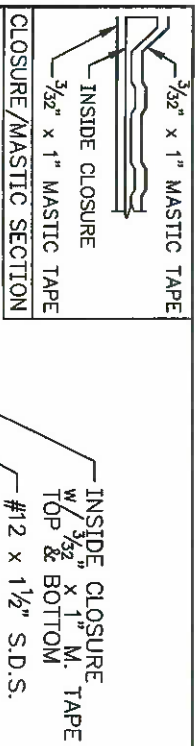
CABLE BRACE DETAIL Q6

- GENERAL NOTES:**
- 1) ALL BOLTS ARE TO BE  $\frac{1}{2}$ "  $\phi$  x  $1\frac{1}{4}$ " A307 UNLESS NOTED.
  - 2) VIEW IS FROM OUTSIDE OF THE BUILDING UNLESS NOTED.
  - 3) ALL DIMENSIONS ARE +/-.
  - 4) MATCH SHOP MARK "X" IF SHOWN.
  - 5) SEE ELEVATIONS AND PLANS FOR MEMBER SIZE(S); THE DETAILS SHOWN MAY NOT INDICATE ACTUAL SIZE.
  - 6) SEE RIGID FRAME ELEVATION(S) FOR PURLIN AND GIRT ORIENTATION.
  - 7) FRAMING CLIPS ARE TYPICALLY TOED DOWN UNLESS NOTED ON THE DRAWINGS.



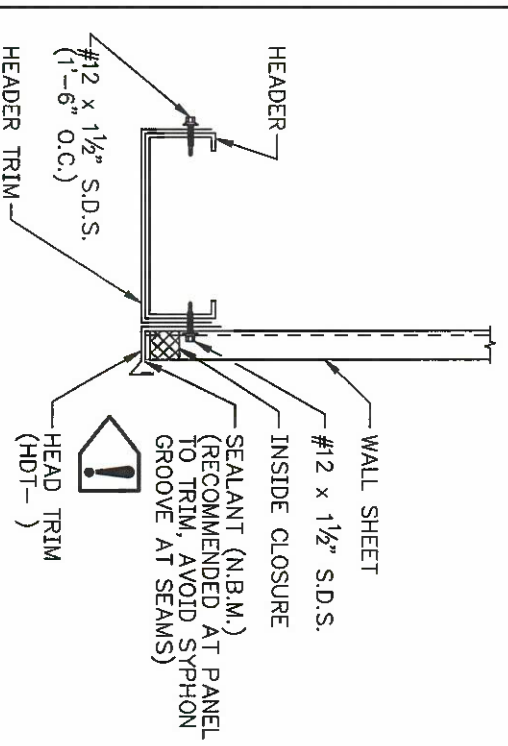
Sunward Steel Buildings  
 BUYER: Henry Williams  
 CUST.: Henry Williams  
 SITE: Angler, NC  
 DESCR.: See Elevations  
 SCALE: NONE  
 JOB#: 108554

DRAWN BY: MMM  
 CHECK BY: 1/9/23  
 DES. ENG.:  
 SHEET NO. G3 OF 5

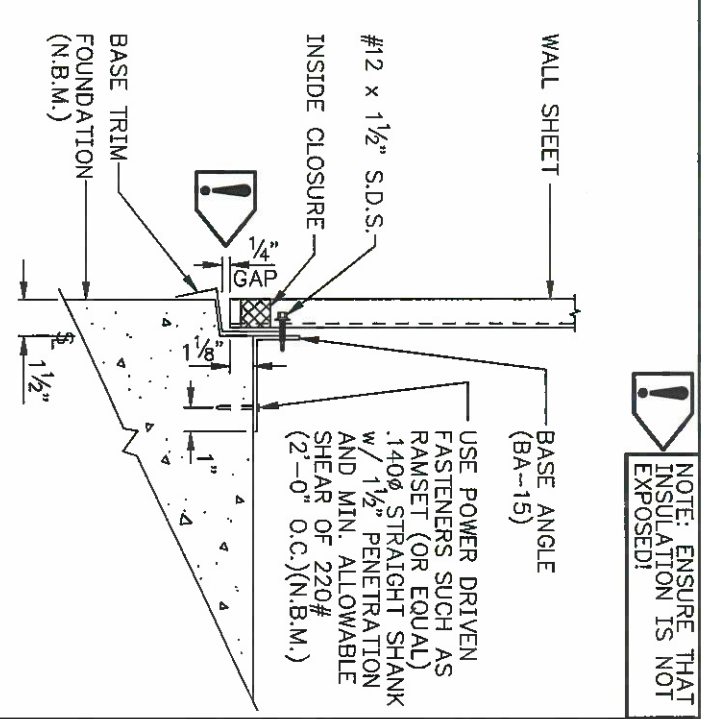


EAVE TRIM SECTION  
TRIM\_1

NOTE: ENSURE THAT INSULATION IS NOT EXPOSED!

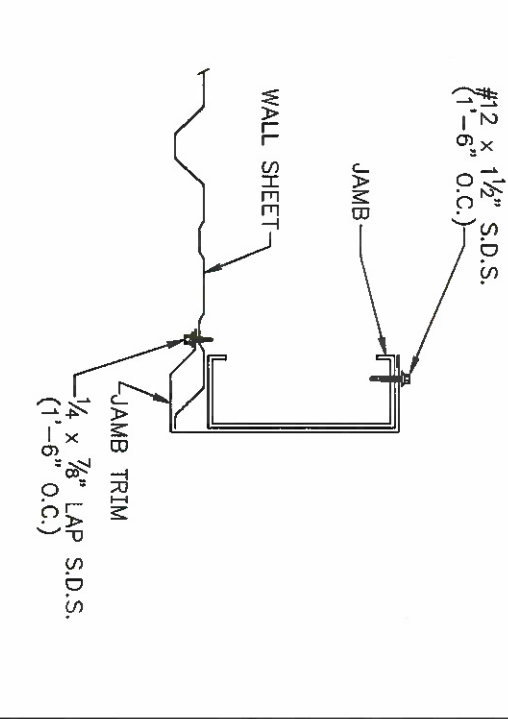


HEADER TRIM  
TRIM\_9

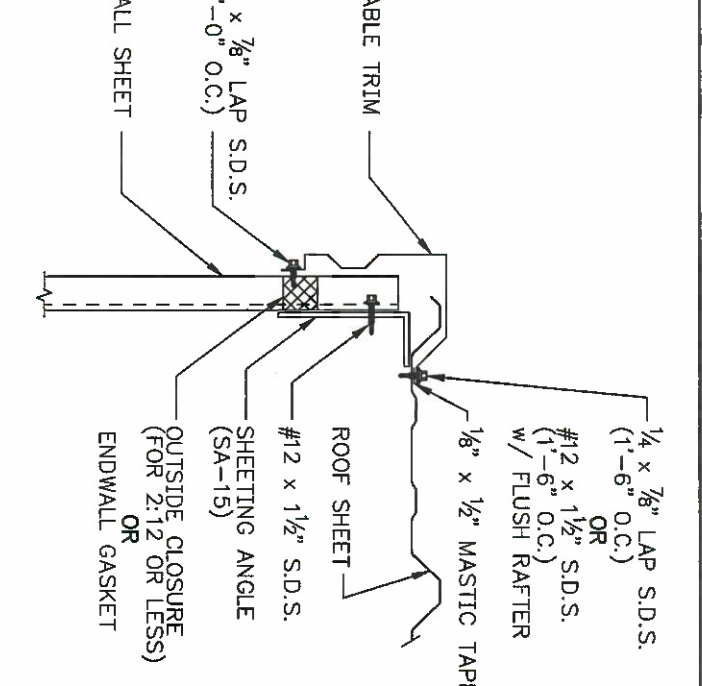


BASE TRIM SECTION  
TRIM\_5

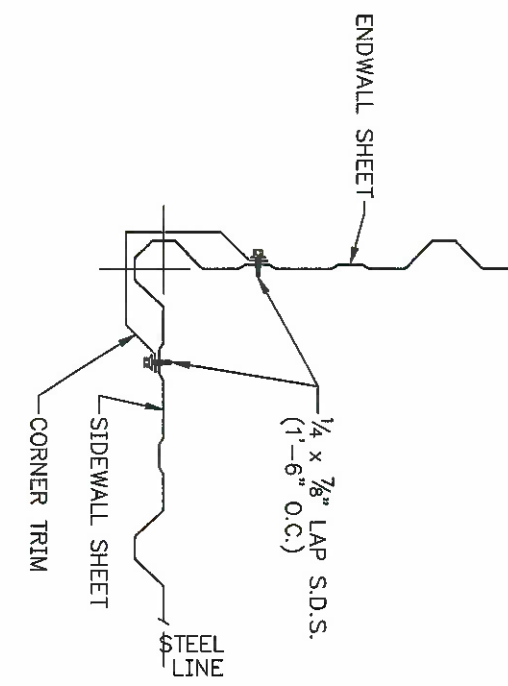
NOTE: ENSURE THAT INSULATION IS NOT EXPOSED!



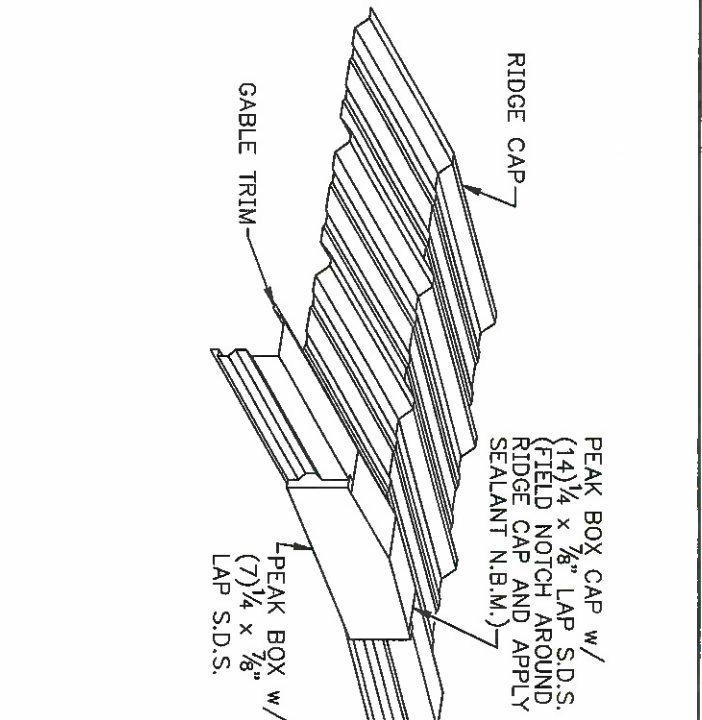
JAMB TRIM (1'-0 inch)  
TRIM\_10



GABLE TRIM SECTION  
TRIM\_7

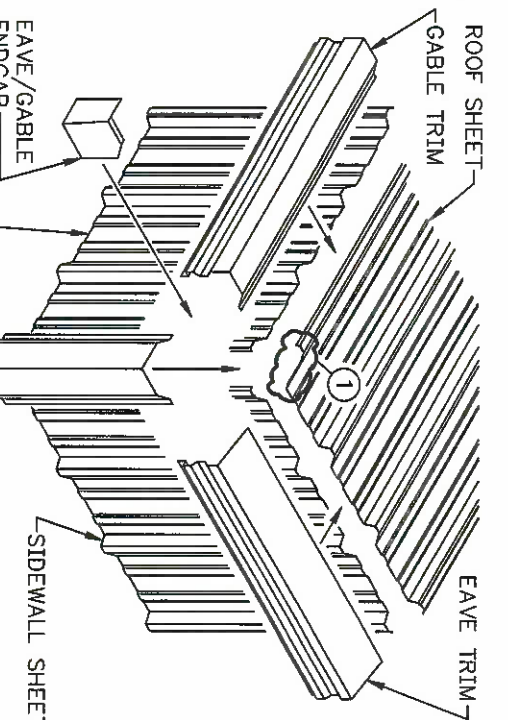


CORNER TRIM SECTION  
TRIM\_30



PEAK BOX  
TRIM\_8

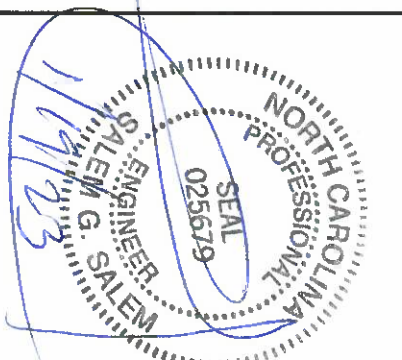
NOTES: ① FIELD NOTCH ROOF SHEET TO ACCOMMODATE ENDCAP.



CORNER DETAIL  
TRIM\_80

**GENERAL NOTES:**

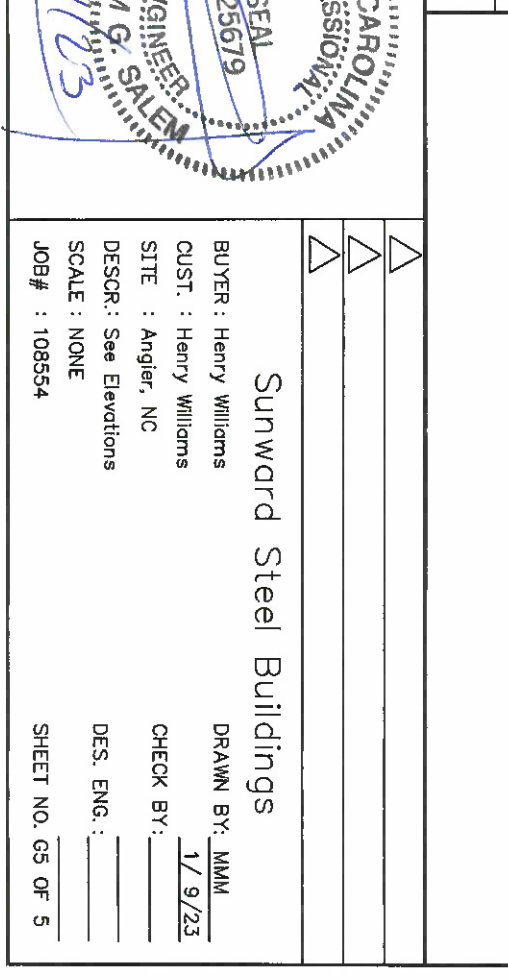
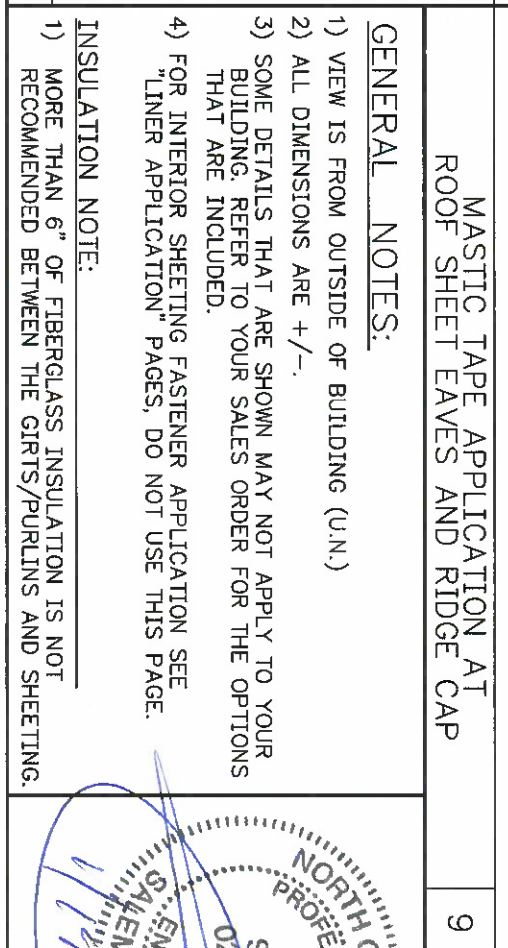
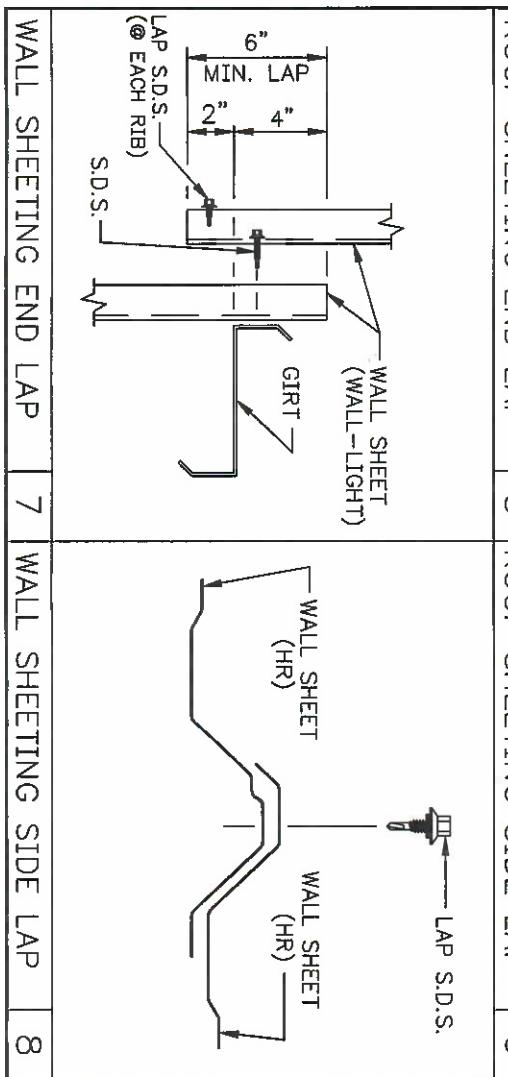
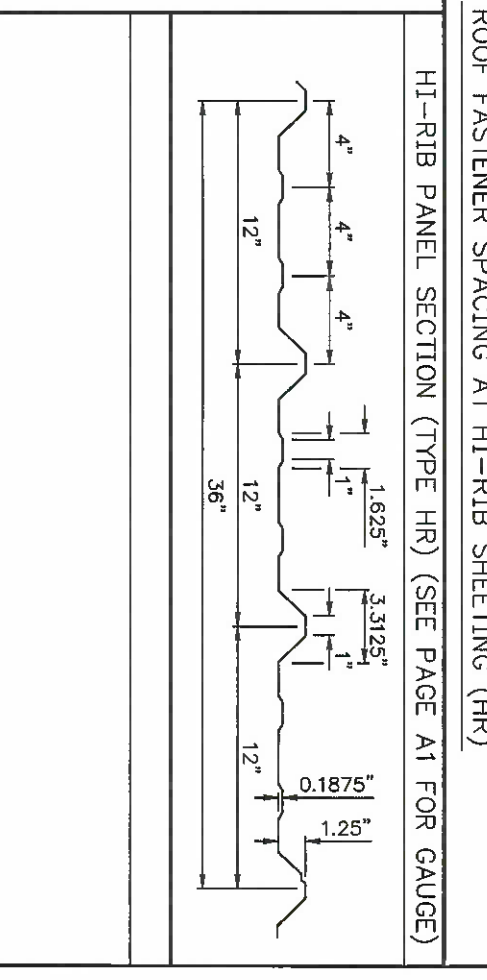
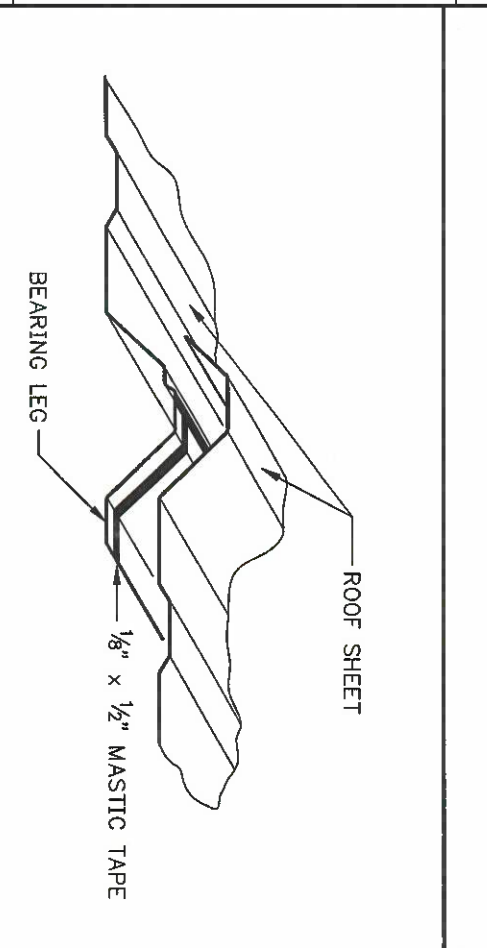
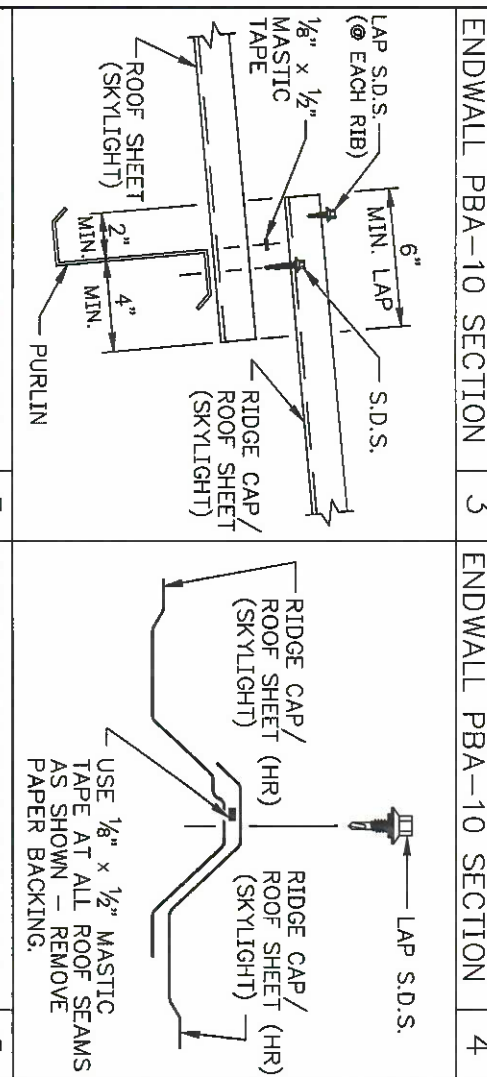
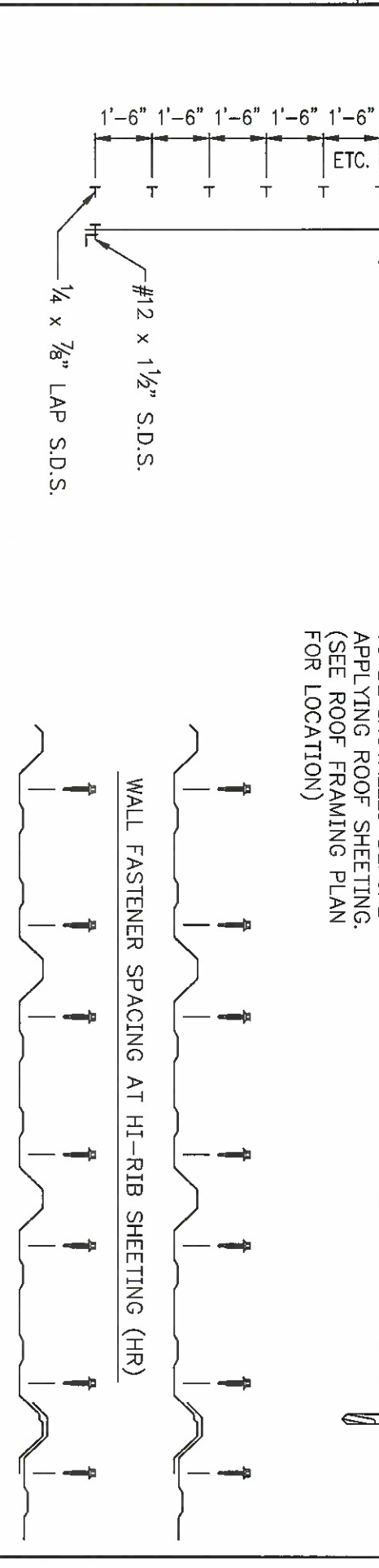
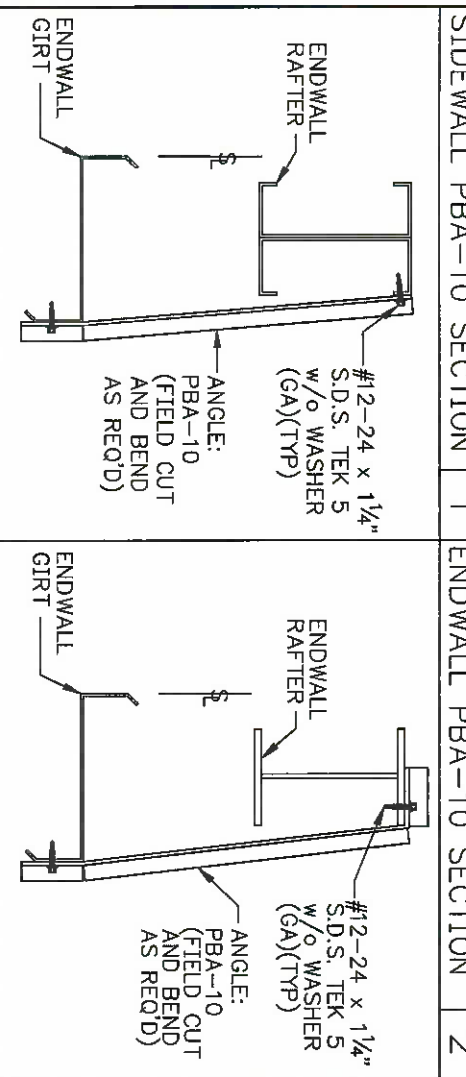
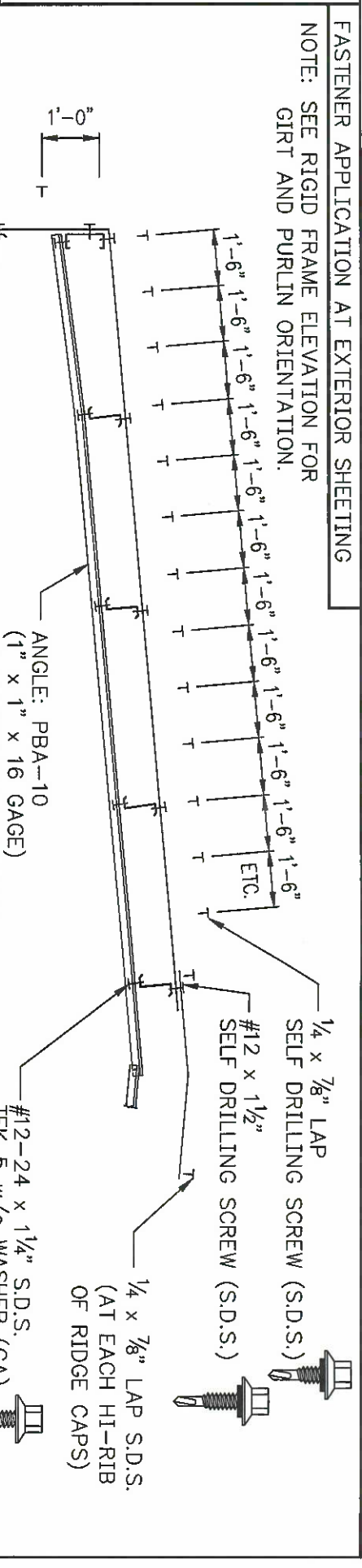
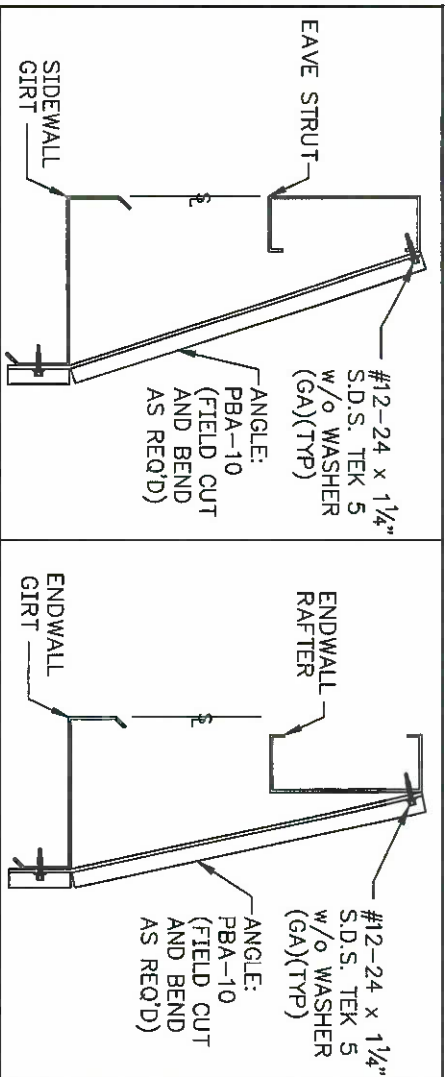
- 1) ALL BOLTS ARE TO BE 1/2"  $\phi$  x 1 1/4" A307 UNLESS NOTED.
- 2) VIEW IS FROM OUTSIDE OF THE BUILDING UNLESS NOTED.
- 3) ALL DIMENSIONS ARE +/-.
- 4) MATCH SHOP MARK "X" IF SHOWN.
- 5) SEE ELEVATIONS AND PLANS FOR MEMBER SIZE(S); THE DETAILS SHOWN MAY NOT INDICATE ACTUAL SIZE.
- 6) SEE RIGID FRAME ELEVATION(S) FOR PURLIN AND GIRT ORIENTATION.
- 7) FRAMING CLIPS ARE TYPICALLY TOED DOWN UNLESS NOTED ON THE DRAWINGS.



**Sunward Steel Buildings**

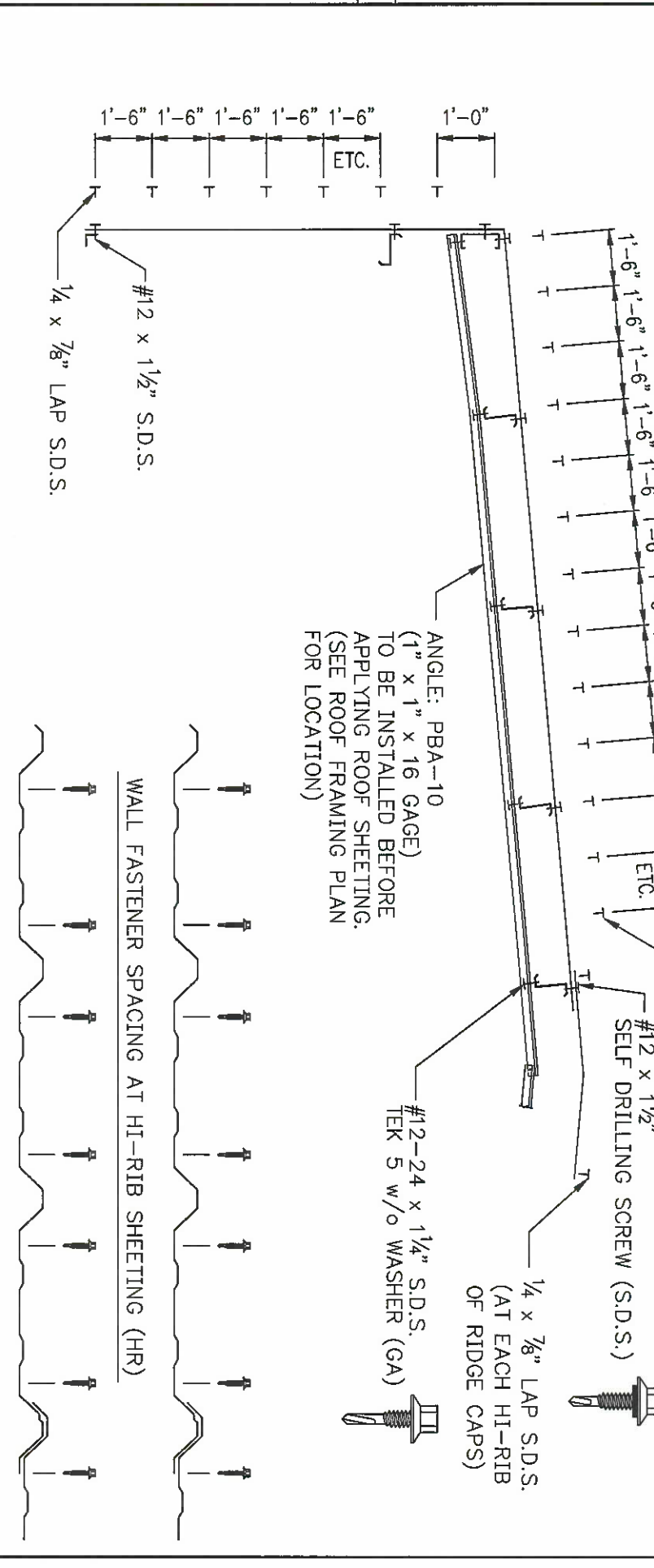
BUYER: Henry Williams  
CUST.: Henry Williams  
SITE: Angler, NC  
DESCR.: See Elevations  
SCALE: NONE  
JOB#: 108554

DRAWN BY: MMM  
1/9/23  
CHECK BY:  
DES. ENG.:  
SHEET NO. 04 OF 5



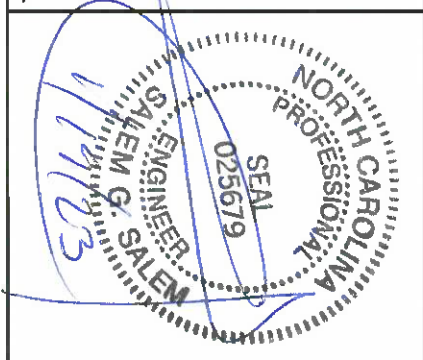
FASTENER APPLICATION AT EXTERIOR SHEETING

NOTE: SEE RIGID FRAME ELEVATION FOR GIRT AND PURLIN ORIENTATION.



**GENERAL NOTES:**

- 1) VIEW IS FROM OUTSIDE OF BUILDING (U.N.)
  - 2) ALL DIMENSIONS ARE +/-.
  - 3) SOME DETAILS THAT ARE SHOWN MAY NOT APPLY TO YOUR BUILDING. REFER TO YOUR SALES ORDER FOR THE OPTIONS THAT ARE INCLUDED.
  - 4) FOR INTERIOR SHEETING FASTENER APPLICATION SEE "LINER APPLICATION" PAGES, DO NOT USE THIS PAGE.
- INSULATION NOTE:  
 1) MORE THAN 6" OF FIBERGLASS INSULATION IS NOT RECOMMENDED BETWEEN THE GIRTS/PURLINS AND SHEETING.



**Sunward Steel Buildings**

BUYER: Henry Williams  
 CUST.: Henry Williams  
 SITE: Angler, NC  
 DESGR.: See Elevations  
 SCALE: NONE  
 JOB#: 108654

DRAWN BY: MAM  
 CHECK BY: 1/9/23  
 DES. ENG.:  
 SHEET NO. 65 OF 5

JOB NAME: Henry Williams

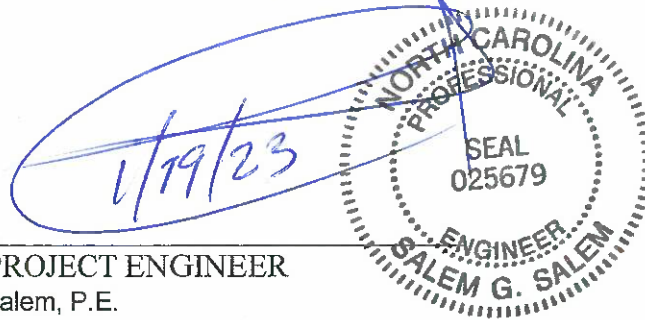
LOCATION: Angier, NC 27501

DESCRIPTION: 30' x 42' x 12'

PO NO.: 108554

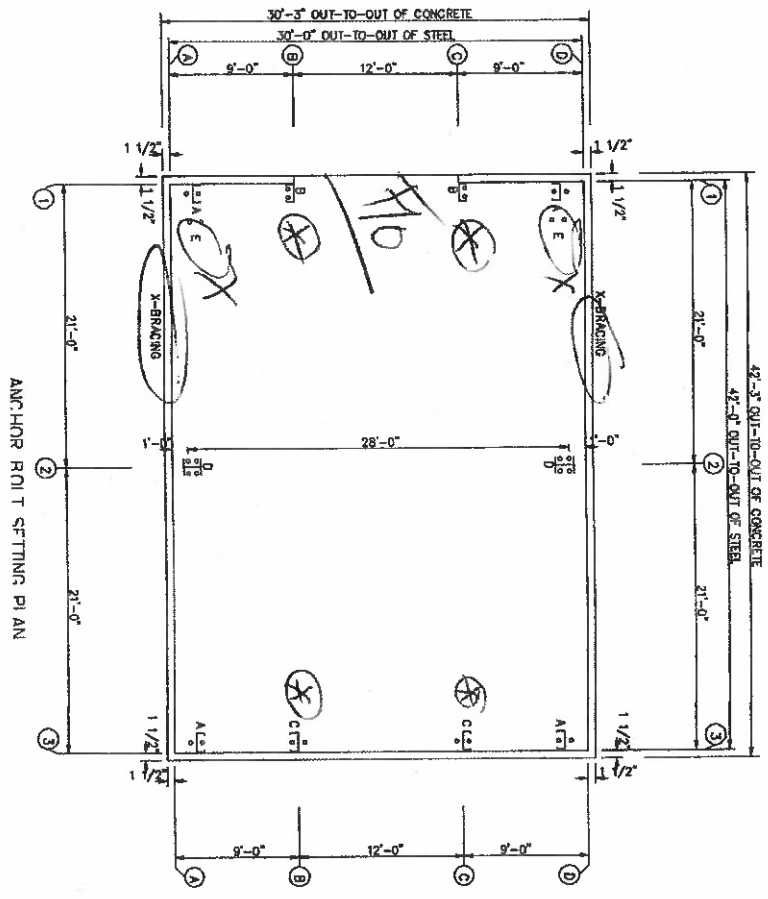
DATE: 1/16/2023

## CALCULATIONS & DETAILS



PROJECT ENGINEER  
Salem Salem, P.E.  
Registered Professional Engineer

①



- 1- Wp sepe AREA.
- 2-  $\otimes$  web crippling clip reqd @ Rafter
- 3-  $\otimes$  Splice plate @ Lewis Peak (2-clips FS/NS)

3/10/23  
 SJ

FB# 108554  
 30 X 42 X 12-0  
 1:12

January 16, 2023

Henry Williams  
Henry Williams  
104 Homestead Ln

Angier, NC 27501

RE: 30' x 42' x 12'

PO # 108554



Jobsite Address: 104 Homestead Ln Angier, NC 27501

Dear Final Owner,

This is to certify that the above referenced structure is being designed in accordance with the International Building Code 2015 for the following loads in addition to the dead load of the structure.

<p>a) Risk Category= II - Normal</p> <p>b) Roof Live Load = 20 psf Tributary Reduction? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Roof Snow Load, Pf = 30 psf (Ground Snow Load, Pg = 42.86 psf with Ce = 1, Ct = 1) Snow Importance = 1</p> <p>c) Wind Speed, V, ultimate= 140 mph, Exposure C Wind Speed, V, asd= 108 mph Component Cladding Pressure= 39 psf Component Cladding Suction= -42 psf Internal Pressure Coeff.= 0.18/-0.18</p> <p>d) Seismic Data: Ss = 0.171, S1 = 0.082, Sds = 0.182, Sdl = 0.131 Site Class D, Seismic Importance = 1 Seismic Design Category = B Seismic Response Coeff., Cs = 0.061 Response Modification Factor., R = 3 Longitudinal Base Shear (kips) = 0.51 Transverse Base Shear (kips) = 0.56 Equivalent Lateral Force Analysis Procedure Seismic Force Resisting Systems: Steel Ordinary Moment Frame (OMF) Steel Ordinary Concentrically Braced Frame (OCBF)</p>	<p>e) Crane: Capacity = N/A tons <input type="checkbox"/> TR <input type="checkbox"/> U/H <input type="checkbox"/> MONORAIL CMAA - Class C unless noted</p> <p>f) Mezzanine Size = N/A LL = psf DL = psf</p> <p>g) Building Enclosure Type: <input checked="" type="checkbox"/> Enclosed <input type="checkbox"/> Partially Enclosed <input type="checkbox"/> Open</p> <p>h) Deflection Criteria: <input checked="" type="checkbox"/> Manufacturer Standard <input type="checkbox"/> Other (Specify):</p> <p>i) Collateral Load (psf) = 1 Others (Specify):</p> <p>j) Dead Load (psf) = 2</p>
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This certification is in accordance to the design loads you requested and specified in the purchase order agreement. The building is designed in accordance with AISC, ASD Fourteenth-Edition, AISI 2013 Edition and MBMA Standard. Sunward Steel Buildings, Inc. makes no representations as to the adequacy of the design loads on the building components you have ordered. It is your responsibility to contact your city or county building officials to determine if the specified design loads you requested are adequate for your geographical area. If you are unfamiliar with the design loads required to obtain the necessary building permits, please contact your building official immediately and verify that the loadings you ordered are correct and in accordance with your building official's requirements for obtaining the necessary permits.

Sunward Steel Buildings, Inc. limited warranty and engineering data are set forth in your SALES ORDER, LIMITED WARRANTY and MANUFACTURER'S AGREEMENT. This certification covers parts manufactured by Sunward Steel Buildings, Inc. only and excludes such parts as doors, windows, masonry, foundation design and erection of the building. The building components not manufactured by Sunward Steel Buildings, Inc. are listed below:

Material: N/A

Manufacturer's Name: N/A

Fabricating Location: N/A

The undersigned is not the engineer of record for the overall project.

Sincerely,

Salem Salem, P.E.

Registered Professional Engineer

